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Title:  
TRI-POCKET

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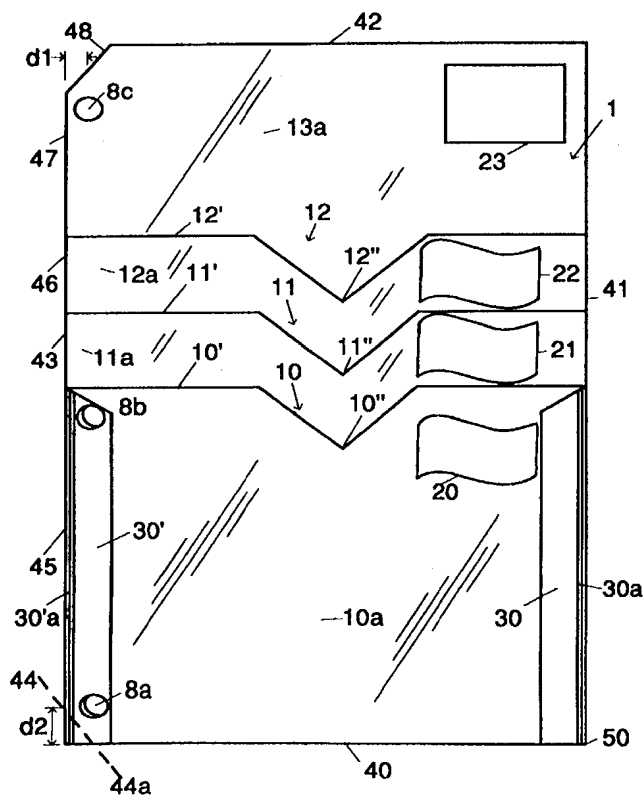


## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> PCT/US97/23138 <b>(22) International Filing Date:</b> 2 December 1997 (02.12.97)  <b>(30) Priority Data:</b> 08/759,758                      3 December 1996 (03.12.96)                      US  <b>(71) Applicant:</b> PRODUCTIVE ENVIRONMENTS, INC. [US/US]; 945 Concord Street, Framingham, MA 01701 (US).  <b>(72) Inventor:</b> SCHWARTZ, David, C.; 55 Flagg Road, Southboro, MA 01772 (US).  <b>(74) Agent:</b> MILDE, Karl, F., Jr.; Furgang & Milde, LLP, Suite 210, 2 Crosfield Avenue, West Nyack, NY 10994 (US).		<b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>

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**TRI-POCKET****BACKGROUND OF THE INVENTION**

This application is a continuation-in-part of copending, commonly assigned United States patent application serial no. 08/197,500, filed Feb 16, 1994. This invention relates to inside out folded dual pocket folders, and particularly to the construction of a multi-pocket folio enclosure which provides three pockets where the entry lips of each successive pocket are stacked one on top of and below the next, all showing on the same face and being formed in a single footprint section.

Two sided pockets have been available which are formed from a dual pocket folio style pocket folded inside-out. These pockets have two entry lips, one on either side of the folded construction and have two open sides. They are unable to support the need for "tri-level front view separate stacking", a requirement for a variety of record keeping applications where information is gathered within a category.

Tri-level stacking on a single face for the purposes of sorting by "Input/Process/Output" or for sorting on the basis of subcategory, as in the separation of a school homework pocket for "homework due/homework returned but in review/homework completed for current reference" have simply been unavailable to date. Tri-level stacking pockets where the pocket array is formed from panels, which panels are formed along two adjacent edges on a back panel which has a single footprint, have been unavailable. Tri-level stacking pockets where the pockets are on the front face and where the pocket array is formed from a single panel sectioned and continuously folded piece of material, where the pocket array can be formed by two folds and a sealing operation, have been unavailable.

The use of a pocket on a cover of a book is known. Examples include what is commonly referred to as a "stasher pocket" which is a pocket on the interior panel of the front cover of a host book. In some instances, more than one pocket is so deployed although not formed in the manner provided for herein. In all instances, the inclusion of such one or more pockets is hidden when the cover of said host book is closed. The exposure of the pocket tabs through the front cover by way of a cut away portion of the front cover permits immediate recognition of the multi-pocket construction of this invention. This has measurable benefit when the product is merchandised in closed form on a store shelf. It has measurable benefit when the consumer owner of the book can use it to distinguish the multi-pocket book from other ones of owed books and in particular to recognize instantly if any one of the pockets has papers contained there-in without having to open the book to make this determination. Recognition of filled pockets is the first step in triggering the process of archiving, the event when the user properly files stored papers. Archiving is a critical aspect in increasing consumer productivity in document handling.

The flat formation of a multipocket having at least three pockets when made from heavy weight materials warrants consideration and the use of structural modification to the folds utilized in the formation. Mass reduction or removal from certain ones of the folds employed allows for super flat formation of a tri-pocket from a folded panel configuration according to the invention without causing a bulky effect at the fold edges and without causing alignment problems in the pocket lip dispositions.

The use of lip edges which permit larger portions of an enclosed leaf to be viewed has been known. Low pockets have been effectively used for this purpose as have slash pockets which have one high edge and one low

edge. In constructing the tri-pocket, a curvilinear shape for each pocket aligned one above the other provides for 3(three) curved lines to be formed giving additional appeal of a wave pattern. Not only is this pattern useful for the purpose of viewing an increased portion of each document, but it also yields a distinguishing or unique visual result that holds emotional sway, particularly with younger children but certainly not limited to this age group.

Book covers come in a variety of forms but often due to the choice of material or due to cost considerations, the ability to display written information on the cover is foregone. The construction of a cover configured with the tri-pocket according to this invention, formed in a substantially clear material, allows for the insertion of a sheet with printed indicia on one side, which when placed into the pocket, shows through on the outside of the cover while still permitting the use of all three pockets.

Filing products with third cut or fifth cut tabs are common in the industry. Providing for a tri-pocket construction where the third cut or fifth cut extended tab is complemented by a base panel configuration itself configured with three pockets is new. Configuring extended tabs with perforations so the consumer can select the position of the index tab has not previously been provided for in this manner.

Making lists of the contents of a pocket is an important way to keep track of documents. Providing a tri-pocket with a cut out panel in the base panel for inserting a card for keeping a record thereon is new.

Once a pocket is used for capturing records, its use in a pile, a binder, in a cubby hole, or in a reference rack is typically determined by the user based on demand for access to the contents. This necessitates consideration of adding other structural support to the tri-pocket for permitting secondary binding attachment.

A tri-pocket having a fold out strip for providing holes to place the pocket in a ringed binder is new. It is also new to deploy a "U-shaped" hook system for placing tri-pocket in a hanging rack and in particular for deploying such a hook system which doubles as a reinforced multi-hole system.

The ability to add a tri-pocket to another host book by way of providing an insertion tongue is new. Further, the use of an additional panel formed as a forth pocket on the side opposing the tri-pocket, where the forth pocket can receive the cover of a host book is new.

Various configurations of the tri-pocket are also new such as a tri-pocket windowing construction where the tri-pocket is the cover, or alternatively, here the tri-pocket is the window itself. A "tanged" tri-pocket is a new and useful configuration permitting the easy permanent sequential binding of recorded in a "last in-first on top" formation.

#### **SUMMARY OF THE INVENTION**

The invention therefore relates to pockets, and in particular to the stacking of an array of three pockets all of which are accessible on the same face side, where the pocket entry lips are layered so as to permit the separation of each of the pockets one from the other.

The invention further relates to the construction of a pocket set of the above described kind, where at least two of the sides of each pocket are enclosed.

Further the invention relates to the construction of a pocket set of the above described kind where three of the sides of each pocket are enclosed, and to the construction of a pocket set having means for attaching the pocket set to a host binding, by way of a hole pattern on one edge thereof.

In particular, the invention relates to the construction of a pocket set according to the invention, formed from one sheet of flexible material such as card

stock, where the cut and fold pattern of the card stock allows for the formation of the complete pocket array by a sequence of two folds and a sealing step.

The invention relates to the construction of pockets of this kind from any flexible material such as spun olefin(tyvek™/Dupont), polypropelene, vinyl, paper, plastic of other varieties or like and similar substances having from flexible to subtly rigid properties and being bondable by way of adhesive tabs, electrical bonding, heat sealing, specialty gluing, stapling and the like.

It is the further object of this invention to provide a pocket construction here the pocket base panel has a cut out section along at least one edge to permit exposure of the pocket tabs through said cut out section.

It is the object of this invention to provide mass reduction patterns for folding a flat version of the tri-pocket from heavier weight materials.

It is the object of this invention to provide a wave patterned tri-pocket configuration where each pocket lip is formed from a curvilinear slope having a common high end and a second common low end, common to each curvilinear lip in sequence.

It is the object of this invention to provide a tri-pocket cover configuration, in particular a front cover configuration, where the back side of the base panel is displayed face up and where it is possible to utilize this base panel to facilitate the record keeping process, whether by constructing the panel with see through material, affixing a see through material to an open panel therein, providing a direct write through open panel, or affixing one or more labels including self stick removable labels thereto.

In addition, it is the object of this invention to configure this tri-pocket with secondary indexing and binding features other than the basic pocket tab and the basic three hole formation. Extended tabs are provided for that allow for multiple indexing. Additionally, a



fold a way multi-hole strip can permit the pocket to be compactly used in a shuffle pile, and later placed in a ring binder. Additionally, hanging rack hooks are provided for. They may be formed as a direct element of the base material or may be provided for with hooks added to the pocket including a retractable hook set that also can optionally double as a reinforced three hole element.

Yet another object of the invention is to deploy the tri-pocket as a "windowing" structure here the tri-pocket itself can be moved as a window into co-planar adjacent positions without losing orientation or where the tri-pocket is a cover of a book having a windowing adapter attached thereto.

Additionally, dual folio versions of the tri-pocket where the tri-pocket is formed on at least one cover are provided for and a configuration having "tangs" is provided for.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

The above and other objects and advantages of the invention will be apparent from consideration of the following drawings taken to conjunction with the detailed description following these drawings, in which like reference characters are used to refer to like parts and in which:

Fig. 1 shows the front view of a tri-level pocket with three sub-category label areas and a larger category label.

Fig. 1a shows the front view of the tri-level pocket of Fig. 1 having solely one tab used for closure of an outer edge of the tri-pocket structure.

Fig. 2 shows the front view of the cut pattern which allows the formation of a tri-pocket according to the invention by two folds and a sealing operation.

Fig. 2a shows the front view of the cut pattern for Fig. 1a in which the pocket formation may be made by the

operation of two folds and a single sealing operation on the closure tab.

Fig. 3 shows a perspective view of the tri-pocket according to the invention placed in a ring binder between the covers of an encasing pocket.

Fig. 4 shows a face view of a tri-pocket master index divider having one set of exposed tab edges.

Fig. 5 shows the reverse view of the master index divider of figure 5 showing the exposed tabs as they would be seen from the front view of the pocket.

Fig. 6 shows a layout of a preferred pattern used to construct the pocket of figure 4.

Fig. 7 shows an alternative pocket construction having a curved pocket formation and 2 sets of exposed tab edges.

Fig. 8 shows a pocket of similar structure to the pocket of Fig. 4 made from see through poly. The class schedule sheet is shown partially inserted. The holes along the edge permit wiring with a spiral or wire-o formation.

Fig. 9 shows a multi-pocket with a base panel having an extended tab edge. Alternate panels are colored.

Fig. 10 shows the reverse side of Fig. 9 showing how the extended tab edge protrudes from the side. The color wraps around to the front face.

Fig. 11 shows a multi-pocket having pockets of substantially the same height and having a window cut out in the front face panel. The pocket has one extended closure tab.

Fig. 12 shows a pocket similar to the pocket of Fig. 11 but having an integral face panel printed with a table and having a short closure tab. The extended tabs are shown perforated.

Fig. 13 shows a pocket of similar construction to that of Fig. 12 except that instead of having extended tabs, it has a fold out flap strip with ring attachment holes.

Fig. 14 shows a pocket of similar construction to that of Fig. 11 except instead of having extended tabs, it has a

flap which retains a "u" shaped frame for hooking onto a rack as a hanging folder.

Fig. 15 shows a pocket of similar construction to that in Fig. 15 except the u-shaped frame is formed in two retractable portions so it may be hidden.

Fig. 16 shows a construction of the retractable hanging folder frames where the construction is formed with integral three hole pattern for use with a ring binder.

Fig. 17 shows a pocket similar in construction to that of Fig. 12 where the pocket has a removable strip exposing adhesive for attaching the pocket to a host surface.

Fig. 17a shows a combination where the cover has a glue pattern laid there on for permanently receiving a multi-pocket.

Fig. 18 shows a multi-pocket where the outer pocket panel is substantially the height of the back panel and the two interior pocket panels are shorter than either front or back panel.

Fig. 19 shows a pocket insert formed to position the pockets on the right hand side of a ring. Exposed tabs are optional. The extended tabs may be of a predetermined extent. The front panel is retained on one hole and the pocket tabs also extend toward the spine.

Fig. 20 shows a pocket of similar construction to that of Fig. 19 having an additional "tongue" portion formed off a top edge for insertion into a host object.

Fig. 21 shows a pocket of similar construction to that of Fig. 19 having an additional "tongue" portion formed off the spine edge for insertion into a host object.

Fig. 22 shows a multi-pocket construction for forming a "cover add on" having a panel which forms a sheath slip pocket on the base panel opposing the multi-pocket formation.

Fig. 22A shows how to use the multipocket cover insert of Fig. 22 where the insert is shown sliding onto a binder cover having no pockets.

Fig. 23 shows a dual covered multi-pocket where the tri-pocket is on the front cover and a single pocket on the rear cover. Tangs are shown for attaching paper. Cut line shows any other formation is possible to combine right of the spine of the multi-pocket formation.

Fig. 24 shows an alternative construction right of the spine of the multipocket where the construction comprises an orientation panel and a hinged attachment strip.

Fig. 25 shows an alternative construction of a multi-pocket where the multipocket is formed on an orientation panel which may be attached to a host.

Fig. 25A shows a construction of the multi-pocket of Fig. 25 where the support panel and orientation panel and attachment panel are shown laid open out to the right and the multi-pocket pattern is laid open out to the left.

Fig. 26 shows a dual sided pocket formation having tri-pocket constructions on both the front and rear panels.

Fig. 27 shows a pocket formation similar to that in Fig. 26 having holes for wiring in a wire for retaining additional papers between the front and rear covers.

Fig. 28 shows an alternative means for constructing a multi-pocket where the "knife cuts" have a temporary retaining portion for holding the pattern elements in place.

Fig. 28A is an exploded view of a construction similar to Fig. 28 where the retaining portion on each panel is formed from two tab elements.

Fig. 29 shows a "clean face" version of the tri-pocket where the closure tab and optional closure tab are formed on the shortest panel. The optional slant cuts are shown dotted.

Fig. 30 shows a pocket construction with a window cut out, panels of substantially the same height, extended tabs, and base panel extended perforated tabs.

Fig. 31 shows a poly material formation where the dotted marks show the pocket when folded into formation and

where the two edges that are molecularly bonded are marked by cross hatching.

Fig. 32 shows a construction of a tri-pocket where that two left most panels fold over and the panel of middle height, the middle panel, is unattached to the shortest panel and there is a mass reduction cut in the hinge joining the smallest panel.

#### **DETAILED DESCRIPTION OF THE INVENTION**

Fig. 1 shows the preferred embodiment of the tri-pocket, 1, where each of the entry lips 10, 11, and 12 are stacked one above the next. The pockets are formed such that the first pocket is between a backing panel 13a and the first pocket panel 12a, the second pocket is between the second pocket panel 11a and the first pocket panel 12a, and the third pocket is between the third pocket panel 10a and the second pocket panel 11a. Each lip is formed from an edge 10', 11', and 12' and has an optional finger depression 10'', 11'', 12''. The lips may be cut at a slant but are shown here with horizontal cuts for each opening. Each pocket has a label 20, 21, and 22 and the pocket, 1, has an overall category label area. Other labeling methods can be employed and still be in the scope of the invention such as die cutting the edges to permit the protrusion of one or more label tabs which would extend outside the "footprint" of the pocket suite (the traditional index tab technique). The pocket set is closed on both right and left sides by tabs 30 and 30'. Each enclosing tab can optionally be fitted with an expansion panel 30a and 30a' which can be formed by striking the sections and leaving them free of adhesive so as to permit expansion upon filling the pockets. Other ways may be employed such as die cutting a series of angled slits as is common practice in other pocket formations. The tab 30' is optional and when the pocket is fitted with the optional holes 8a and 8b, the enclosure can be provided by the rings of a host ring

binder. Fig. 1a shows the front view of the pocket described above formed with only one tab closure structure, 30, which tab forms the closure along a second of the closed edges, 41, of the multi-pocket array, leaving two open or free edges, 45, and the set of edges 10'/11'/12'.

Each of the edges 45, 43, 46, and 47 are brought together to make the pockets as shown in Fig. 2. Here the pattern is opened to disclose the preferred method of construction. The pocket lips are each at a respective distance from 40', which distances are H1, H2, H3, and H4. H1 is greater than H2 which is greater than H3, which is greater than H4. Made from a card stock, optionally in colored form where each panel can be a different color or a set of pockets each having a different color can be made. The first fold is about axis 41'. This brings over edge 46 and 43. The second fold is about axis 40' which brings up edge 45 and 43. The sealing step involves bonding tab 30 to the front of the face of section 10a. Optional tab 30' may also be bonded thereon. The tabs are on the opposing lateral edges of the backing panel and are die cut therein, where one tab extends outside the foot print of the edge on which it is cut and the other is cut from the first pocket panel 12a. Category label 23 is shown. Tabs may be cut to extend from an edge to further improve on the indexing. One or more of the lip edges 42, 10', 11', and 12' can be slash cut (i.e. cut at an angle) and still be within the scope of this invention. Fig. 2a shows the front view of the cut pattern for Fig. 1a in which the pocket formation may be made by the operation of two folds, a first fold along axis 41', and a second fold along axis 40', and a single sealing operation on the closure tab, 30, which is sealed onto the front face of panel 10a.

Fig. 3 shows a perspective view of the tri-pocket, 1, according to the invention placed in a ring binder

between the covers of an encasing pocket, 1a. The distance d1 is set to enable the "cocooning" of the tri-pocket within an encasing pocket and the distance d2 is set so as to allow the tri-pocket to fit within the foot print of the encasing pocket 1a, and still allow the tab 4', to "show past it".

The bonding step will depend on the material used. Special adhesive is needed for Tyvek for example. Cardstock can be glued. Instead of tabs 30 and 30', other methods can be employed. The edge can be stapled for example.

Optional angle cuts 48, and 44/44', and 49/49' allow for the use of this pocket array in a ring binder and enable the pocket to miss the ring binder clips. In Fig. 3, the use of the tri-pocket within a cocoon, which is set within a ring binder is shown. The hole distances d1 and d2 are particularly important for the preferred application of "cocooning". In cocooning, the pocket will be placed within another enclosing pocket. The enclosing pocket will be retained in a standard ring binder of any ring dimension. Therefore, the offset distance d1 should be "narrow" allowing for retention of the pocket array as close to the ring binder as possible. Reinforcing the holes may be desirable to allow for the shortest realistic distance d1. Further d2 should be set to permit the bottom edge of the pocket 40 to reside on order of 1/2" from the bottom of the host ring binder. For this reason, 48 is slit to permit the top corner to turn freely past a host ring binders clips when present. The cocooning construction is fundamental to the application of this pocket configuration in what we are calling "Demand Paging" where one carries or moves around a set of leaves of paper which are related to "current transactions" and the objective for portability achieves the "10/90" rule where 10% of the "mission critical" information you need is available to you 90% of the time

in the cocoon configuration you have at your finger tips at that moment.

Demand paging allows leaves to move through the cocoon, and in particular the tri-pocket array on an as needed basis, where as records on leaves "age" they can be moved to a respective archive for referential access.

The preferred construction would be in a card stock and would be of a suitable color to fit with the consumer application, manilla being a popular one with most universal appeal.

Edges 10', 11'. and 12' can be slant cut to give the pockets greater opening feel without losing the holding capacity of the each pocket portion. The Pocket may be bonded from sections of plastic or die cut and folded over plastic which would eliminate the need for the extra tab sections which are adhesively overlapped. With plastic, various ways of sealing are possible where the molecules are excited and temporarily liquify allowing adhesion. Expansion sections can be included in either method to allow for increased storage capacity in the pocket area. The pressure of each pocket one on the next gives sufficient holding strength to materials encased to make the pocket a highly portable means for sorting and carrying temporary information. The subcategory feature lends itself to archival storage as well.

An additional group of preferred embodiments and alternative embodiments now follow. In Fig. 4, the preferred embodiment of a master index section divider is shown. Cut out 200 exposes tabs 220a, 221a, and 222a. The edges of interior pockets 111'' ad 120'', that is edges 143 and 146 are shorter in width and the edge of pocket 100'' formed with edge 145. This permits retaining all three pockets using holes 180b and 180a in panel 100a. Optionally, the edge 100' could be cut in a pattern and deployed using only hole 180a, or no holes and still be within the scope of this invention. Ends 148 and 149 allow the pocket to fit past the thumb tabs



of a ring binder and be used as large as possible while still protruding outside the covers. These cuts are optional. Fig. 5 shows the reverse or face portion of the index divider. Pocket lips 100', 110', and 120' are shown as dotted lines. Tabs 220a, 221a, and 222a are shown exposed past contoured cut out 201. Fig. 6 shows the formation which would be used to construct Fig. 5/6. In this laid open vie, each of the die cut tabs is clearly shown. Slots 310 and 320 remove mass from the folds along axes 410' and 400'. Fold A places panels 1p and 2p on top of base 4B and 3p. Fold A places panels 1 and 2p on top of base 4B and panel 3p, fold B and rings coplanar panels 2p and 3p up on top of coplaner panels 1p and 4B. Tab 300 is folded over onto the top of panel 3p and is affixed thereto. In Fig. 7, the entry lips are wave patterns 100'', 110'', and 120'' aligned one on top of the next. Tabs 220a', 221a', and 222a' are exposed through contoured cut out 201'. The tabs extend into the spine to point 200' which would permit the tab faces to be visible even when the pocket is filled with papers.

In Fig. 8, the pocket 300' is configured for attachment to a wirebook by way of hole grouping 185. The material is see through as indicated by surface 510, permitting viewing of schedule 500 when inserted therein.

In Fig. 9, at least one panel is colored. This shows up as a band of color where panel 700 shows the color, 705 is uncolored, 710 shows the color, and 715 is uncolored. This configuration would be manufactured by tinting one side of the die pattern. Fig 10 shows the reverse side 720 which has the same color as panel 700. Extended tab 600 stands proud of the base panel.

Fig. 11 shows an extended tab configuration having base extended tabs 610, 620, and 630 perforated for removal at 610', 620', and 630'. Pocket heights 752, 751, and 750 are substantially the base panel height 753. Panel cutout 900 permits direct write through onto any surface exposed through the cut out.

Fig. 12 presents a pocket configuration where the base panel is printed with indicia 910, directly thereon with a pocket of this construction made in paper board, lists of contents can be maintained directly on the pocket. Fig. 13 has a pocket of similar construction to that of Fig. 12 in addition, it has a fold out strip 650 which folds using fold 654 along crease line 655. Holes 651, 652, and 653 can be deployed by extending strip 650 outwardly.

In Fig. 14, the window as shown in Fig. 11 is now spot laminated with a clear material 901 which is affixed to frame 902. A hook, 661, is of a frame which is made of a sturdy material such as metal or plastic and is affixed within strip 660. The hook would have a matching pair component that would protrude from the other side. For the purpose of this illustration, however, hook 662 is shown as a foldably retractable hook integrally formed from the base panel 754. The hook would be retracted by folding it over fold A and optionally tucking it into base panel slot 662'. Alternatively, Fig. 15 shows two independent frame elements with hooks 671 and 672 which would be slidably retained in a strip pocket formed by flap strip 690'. Figs. 16a, b, and c show an explosion of a similar construction to the one depicted in Fig 15. The formation of Fig. 16 has frame components 696 and 697 slidably retained in the strip formed by 690'' attached to base panel 697 by tabs 691'' and 692''. The strip has through holes 695a, b, c that match up with the base holes 695a', b', c'. In combination, these match up with holes 695a'', 696b' and b'', and 696c'. Retaining tabs 690a''' and 690b''' slide in the cut out portions 691''x and 692''x a distance D1, to permit hooks 672' and 672'' to move out or to be retracted in. The hook 690''' could be at alternative lengths along the frame 696 and remain within the scope of the invention. The frames should be constructed from a substantially rigid material such as metal or plastic.

Fig. 17 shows a base panel having a peelable adhesive strip 1000 for permitting the multipocket to be attached to another host surface. Peeling back strip 1000 leaves adhesive 1010. Fig. 17a shows the direct affixing of a multi-pocket 1040 to a base 1020 using an affixing material and pattern 1030. The pocket can be affixed by molecular bonding if plastic materials are used.

Fig. 18 shows a multipocket having interior pocket heights 1050 and 1051 being lower than the base panel height 1053 and front panel height 1052.

Fig. 19 shows a pocket with a printed label on the lower face panel. It shows insertable holes 1800 which may be snapped into a ring binder. Also, the tabs 2220, 2210, 2220 can be extended as 2220a, 2210a, and 2200a as can tab 2220' be extended by width d100 to permit moving the tab when the pocket is fully loaded. The face panel 2259 is retained solely by one hole 2251. The other panels are recessed 2252, 2258, and 2257 to clear holes 1800 and 1800a.

In Fig. 20, this add a tri-pocket formation permits inserting tab 2260 in the direction 2261 to place the pocket into a host receiving pocket, as in a pad folder or the like. The tongue 2260 is a direct extension along 1420 and can be an integral part of the base panel or added by attaching a panel portion there to. In Fig. 21, the tongue 2270 is formed along edge 1470 and bent back in the direction 2272 to insert in the direction 2271.

In Fig. 22, a pocket is formed on the base panel using 2260 and enclosing it onto the tri-pocket front panel using 2265' tab and optionally tab 2266'.

The pocket 2260'' formed therein permits using the tri-pocket like a slip cover to fit onto any book. It can be permanently affixed there to or can be used removably for the purpose of secondary filing.

Fig. 23 shows a dual folio configuration where pocket 3041 is affixed to 3050 along spine 3050. Tongs

3010, 3020, and 3030 would be used to retain loose papers. Cut 3000, 3000a is meant to convey that the tri-pocket and spine can be attached to any secondary member to expand the functional value of the basic invention. The tri-pockets have tabs extended distance d200 at the spine to permit viewing the tabs when the pockets are full.

Fig. 24 shows a windowing attachment where pane 3500 is an orientation panel for a second panel which would be attached substantially at its midpoint to a hinged strip 3520 using adhesive 3510. 3520 rotates as shown by arrow 3530 and spine 3050' rotates as shown by arrow 3540.

In Fig. 25, the tri-pocket itself is formed as the window panel using support panel 4060 which is connected to orientation panel 4040, which in turn is optionally connected to extension panel 4050. Tab 4000 is a pull tab. Flaps 4020 and 4030 hold the pockets closed. Fig. 25a shows the laid out construction of the windowing tri-pocket of Fig. 25.

Fig. 26 shows a dual pocket formation where each cover 5000 and 5010 are formed as tri-pockets. In Fig. 27, a pocket formation similar to that in Fig. 26 additionally contained wiring holes 5020, 5030, and 5080 or slots for receiving binding structure therein. Wire 5040 or 5050 fit into the wireholes. Ring tab 5060 fits into slots 5080.

Fig. 28 shows a reduced mass hinge fold formation using retaining tabs 6000 and 6010 to hold the die pattern during folding. After construction, the retain tabs can separate with no loss to pocket integrity. Fig. 28a shows a blow up of a similar tab structure to that in Fig. 28 except here 2 tabs are used in back panel portion, 6000' and 6000'', and 6010' and 6010''.

In Fig. 29, a "clean face" configuration pattern is shown where closure tab 8000 is formed off a panel other than the base panel. Slant cuts 7000, 7010, and 7020 are shown to demonstrate how a slash tri-pocket would be

formed. Tab 8010 is optional. Fig. 30 shows a formation where all the pockets are substantially the same height. A cut out 900' has a strip laminated clear panel, 900'', here it is affixed at 900''' using glue for example. Pocket panels P1' and P2' have a width d300' which is narrower than the width d400' of panel B4' and panel P3'. Extended tabs 9000, 9010, and 9020 are perforated for optional individual removal.

Fig. 31 shows a plastic formation where edge 9510 is molecularly bonded to edge 9500 to form a closure tab.

Fig. 32 shows a folding die pattern where panel P1''' and P2''' are integrally hinged having mass reduced at their hinge h30 shown as cut portion m300. Panel P3''' is integrally hinged to B4'''. B4''' is integrally hinged to P1'''. P2''' is not connected to P3'''. Section S1 raises tab T1 off corner C5. A portion of optional mirror pocket suite 9900 is shown laid open to the right.

**Claims:**

One skilled in the art will appreciate that the present invention can be practiced by other than the embodiments described, which are presented for the purpose of illustration and no of limitation and the present invention is limited only by the claims which follow. What is claimed is:

1. A section of foldable material for forming a tri-pocket array, said section of material comprising at least an interconnected set of panels including a backing panel of predetermined height having perimeter features including adjoining first and second backing panel edges, a first pocket panel, a second pocket panel, and a third pocket panel, said interconnected set of pocket panels being attached off at least one of said first and said second of said adjoining first and second backing panel edges, said each of said pocket panels having an entry lip edge of predetermined height, said pocket panels for forming a first pocket, a second pocket, and a third pocket of a tri-pocket array, wherein a first pocket panel of said first, second, and third pocket panels is disposed along a first of said first and second adjoining backing panel edges, and a third pocket panel of said first, second, and third pocket panels is disposed along a second of- said first and second adjoining backing panel edges, and where a second pocket panel of said first, second, and third pocket panels is disposed between said first pocket panel and said third pocket panel of said first, second, and third pocket panels, and where said first of said pocket panels is so disposed to form the outer most pocket of said first second and third pockets, and where at least one of said first, said second, and said third of said pocket panels has a closure tab hingedly die cut therein.

2. A tri-pocket array having an inner pocket, an outer pocket, and a middle pocket interposed between said inner pocket and said outer pocket, providing a first pocket, a second pocket, and a third pocket, said tri-pocket array comprising: a first closure structure, and at least an inter-folded set of interconnected panels, said interconnected panels comprising a section of foldable material having a backing panel, a first pocket panel, a second pocket panel, and a third pocket panel, said backing panel having perimeter features including a front face, a back face, and adjoining first and second backing panel closure edges, said each of said pocket panels having perimeter features including a front face, an entry lip edge and a plurality of pocket panel edges, said pocket panels for forming said first pocket, said second pocket, and said third pocket of said tri-pocket array, said closure structure for closing a common pocket panel edge of said plurality of pocket panel edges of said each of said first, second, and third pocket panels, wherein said pocket panels are interconnected with said backing panel along at least one of said first and said second of said adjoining first and second backing panel closure edges, and said pocket panels are inter-folded, each one on top the other, and on top of a common face of said backing panel with each of said entry lip edges of said first, second, and third pocket panels substantially co planar on top of said common face of said backing panel, and wherein said first closure structure is closed with said outer pocket along one of said first and said second adjoining first and second backing panel closure edges, such that at least two of each of said plurality of pocket panel edges of said each of said first, second, and third pocket panels is substantially closed and each of said entry lip edges of said first, second, and third pocket panels is substantially open, thereby forming a multi-level pocket array comprising a first pocket, a second pocket, and a third pocket, said tri-pocket array

further comprising a backing panel wherein said backing panel has a cut out portion along at least one of said opposing backing panel edges, where said cut out portion substantially overlays the tab edges of said first, said second and said third pocket panels, thereby exposing said tab edges of said first, second and third pocket panels.

3. The tri-pocket array of claim 2 where said first closure structure is a foldable tab formed on at least one of said first, said second, and said third of said pocket panels.

4. The tri-pocket array of claim 2 where said each of said pocket panels has a wave pattern cut along said entry lip edge for allowing for separation of one pocket panel from the next.

5. The tri-pocket array of claim 2 where at least one of said front faces of at least one of said pocket panels and said backing panel has a color.

6. The foldable tab of claim 3 where said foldable tab further comprises an expansion section.

7. The tri-pocket array of claim 2 where said section of foldable material is tyvek spun olefin material.

8. The tri-pocket array of claim 2 where said section of foldable material is card stock material.

9. The tri-pocket array of claim 2 where said section of foldable material is a plastic material.

10. The tri-pocket array of claim 2 where said section of foldable material is vinyl material.



11. A tri-pocket array having an inner pocket, an outer pocket, and a middle pocket interposed between said inner pocket and said outer pocket, providing a first pocket, a second pocket, and a third pocket, said tri-pocket array comprising: a first closure structure, and at least an inter-folded set of interconnected panels, said interconnected panels comprising a section of foldable material having a backing panel, a first pocket panel, a second pocket panel, and a third pocket panel, said each of said first, second and third pocket panels having at least a first pocket panel tab, a second pocket panel tab, and a third pocket panel tab respectively formed on each of said pocket panels, said backing panel having perimeter features including a front face, a back face, adjoining first and second backing panel closure edges, and opposing backing panel edges, said each of said pocket panels having perimeter features including a front face, an entry lip edge and a plurality of pocket panel edges, said pocket panels for forming said first pocket, said second pocket, and said third pocket of said tri-pocket array, said closure structure for closing a common pocket panel edge of said plurality of pocket panel edges of said each of said first, second, and third pocket panels, wherein said pocket panels are interconnected with said backing panel along at least one of said first and said second of said adjoining first and second backing panel closure edges, and said pocket panels are inter-folded, each one on top the other, and on top of a common face of said backing panel with each of said entry lip edges of said first, second, and third pocket panels substantially co-planar on top of: said common face of said backing panel, and wherein said first closure structure is closed with said outer pocket along one of said first and said second adjoining first and second backing panel closure edges such that at least two of each of said plurality of pocket panel edges of said each of said first, second, and third pocket panels is

substantially closed and each of said entry lip edges of said first, second, and third pocket panels is substantially open, thereby forming a multi-level pocket array comprising a first pocket, a second pocket, and a third pocket; and wherein said each of said pocket panel tabs is extended outwardly on the edge opposing said closure tab a predetermined length substantially positioning the tab to the edge of said opposing backing panel outer edge.

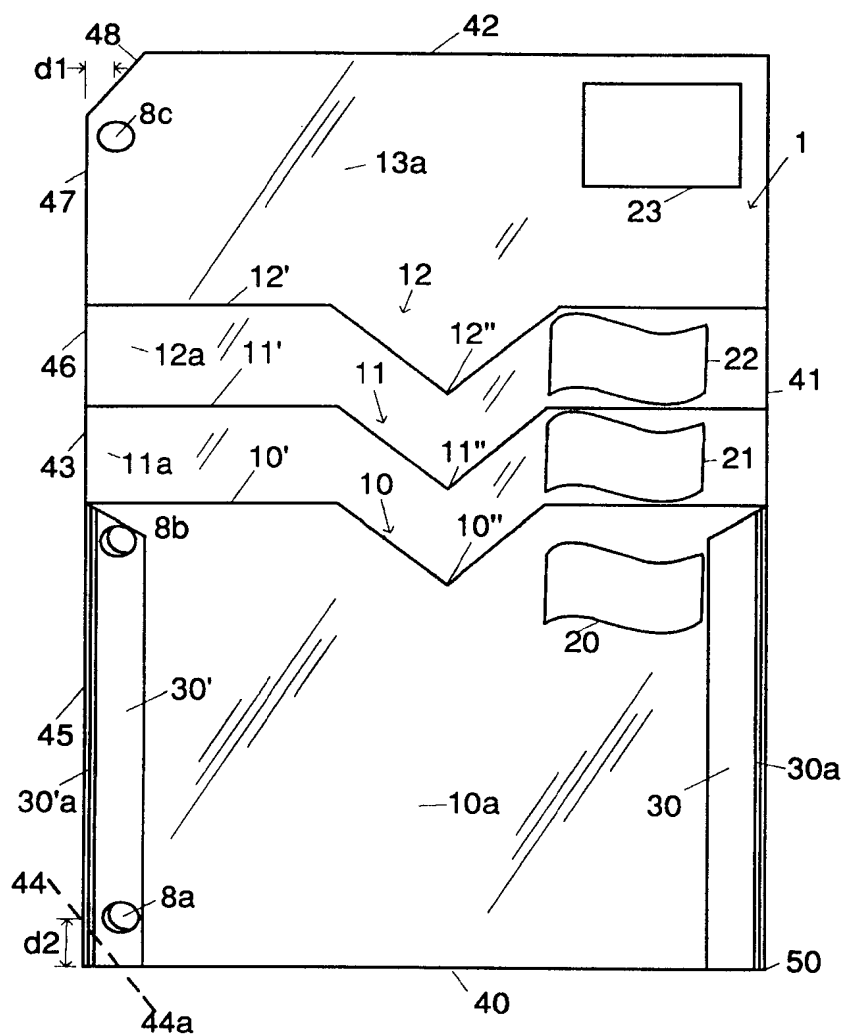
12. A tri-pocket array comprising an interconnected set of panels, said interconnected set of panels comprising a backing panel of predetermined height having perimeter features including a front face, a back face, and two sets of opposing edges, a first set of edges and a second set of edges, and a set of pocket panels including a first pocket panel, a second pocket panel, and a third pocket panel, wherein each of said pocket panels is disposed substantially adjacent at least one of said first, said second, and said third of said pocket panels, said each of said pocket panels having an entry lip edge of a predetermined height for forming an entry lip of a first, a second, and a third pocket, and wherein said set of pocket panels is interfolded one on top of the other, and on top of a common face of said backing panel to form a first inner pocket, a portion of a second middle pocket, and a third outer most pocket, said portion of said second middle pocket is interposed between said first inner pocket and said third outer most pocket, wherein said third outer most pocket has a visible face, and wherein at least one closure tab is formed in at least one of said pocket panels, such that when said closure tab is folded over said closure tab edge and fixedly attached to said third outer most pocket panel of the interfolded pocket panels, said second pocket is formed along said closure tab; such that each of said first, second, and third pockets has a

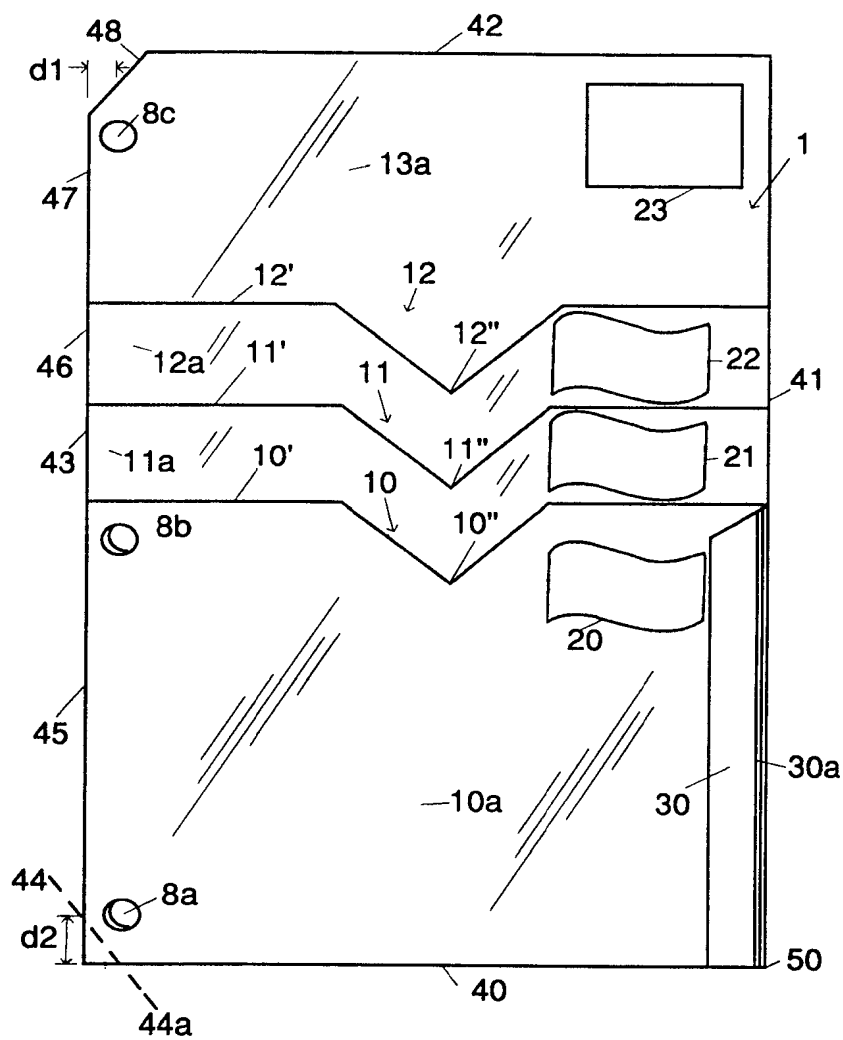
substantially open entry lip and three sides, and at least one of said three sides of each of said first, second, and third pockets is substantially an open side.

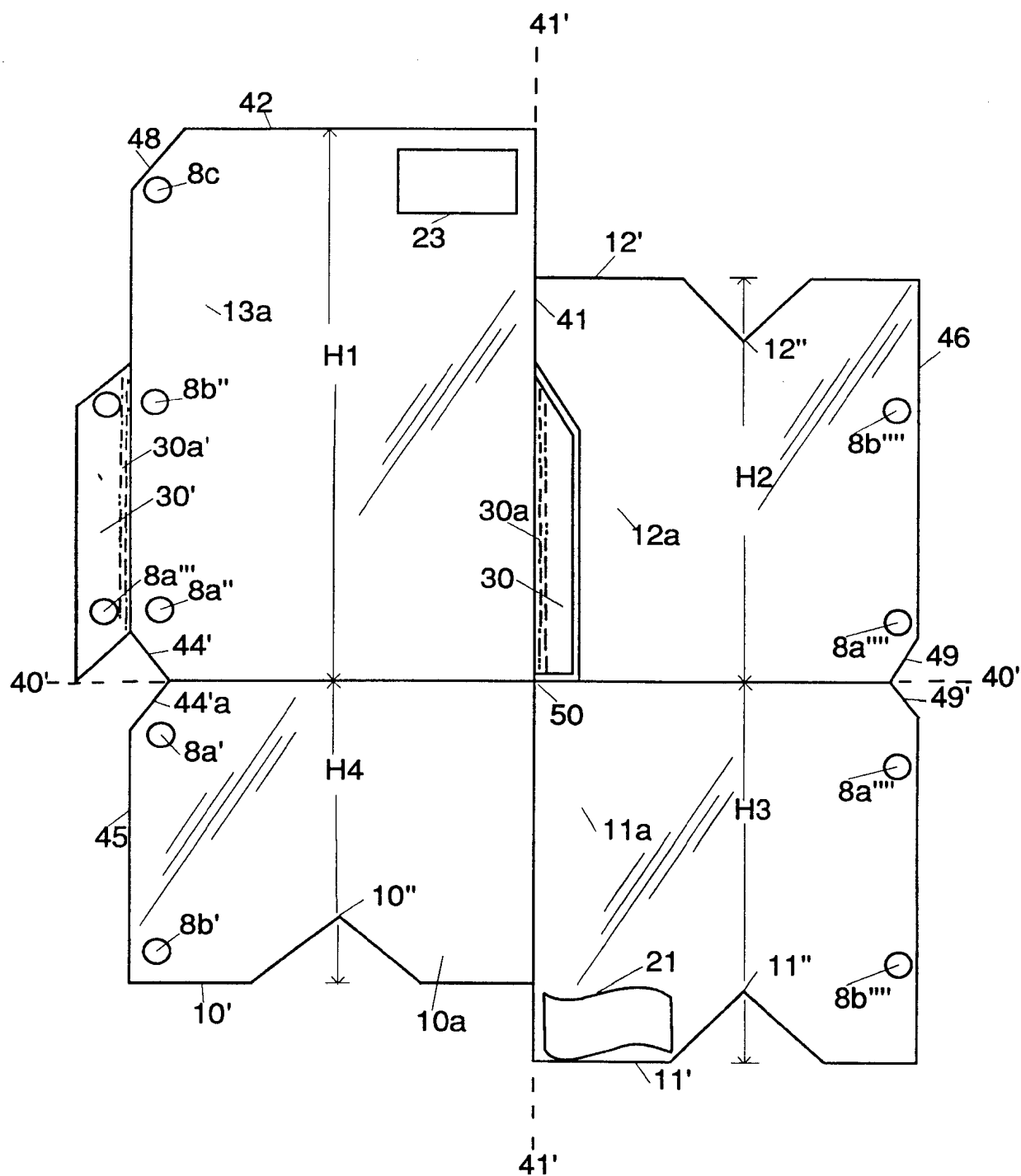
13. The tri-pocket array of claim 9 where in said plastic material is polypropylene.

14. The tri-pocket array of claim 9 where in said plastic material is substantially see through.

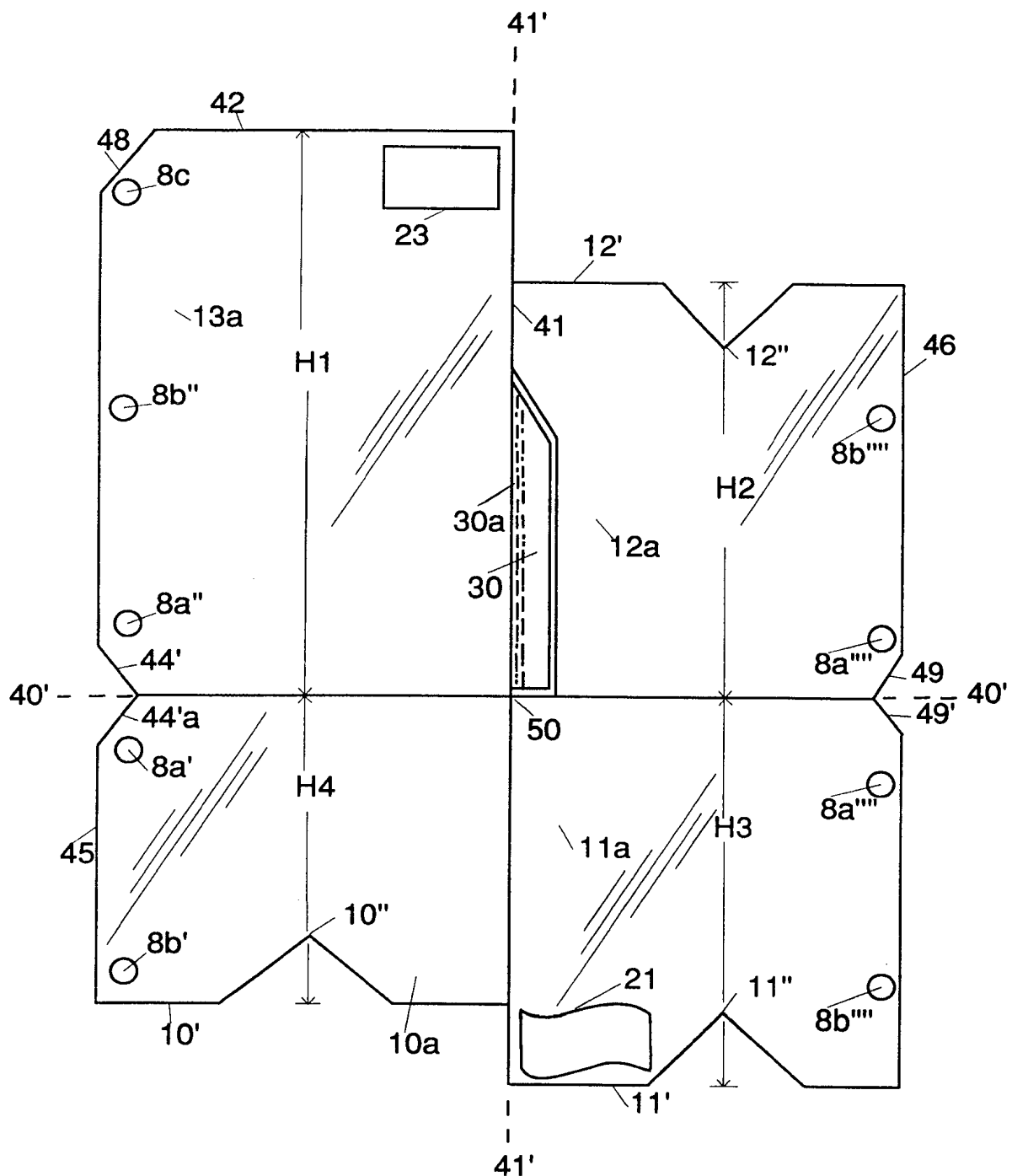
15. The tri-pocket array of claim 11 wherein at least one of said opposing backing panel edges has an extended tab along said at least one of said opposing backing panel edges.

**Fig. 1**

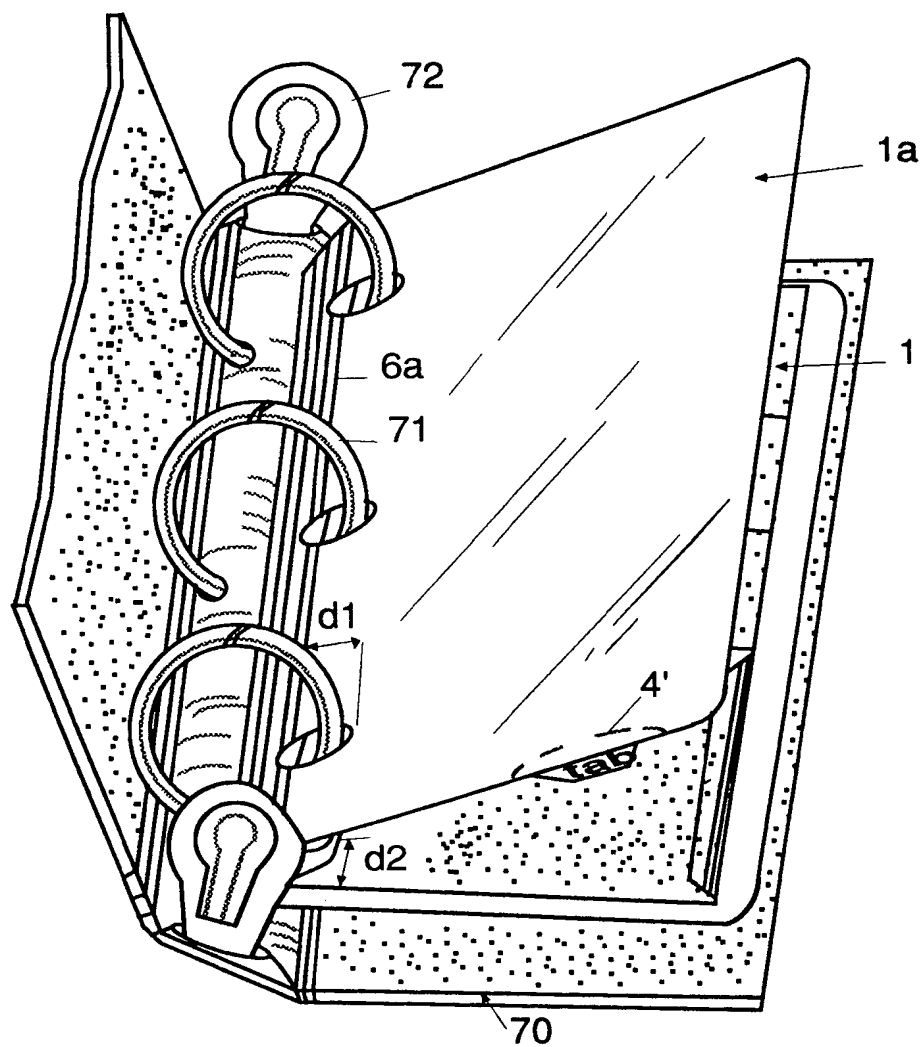
**Fig. 1a**



### Fig. 2



**Fig. 2a**

**Fig.3**



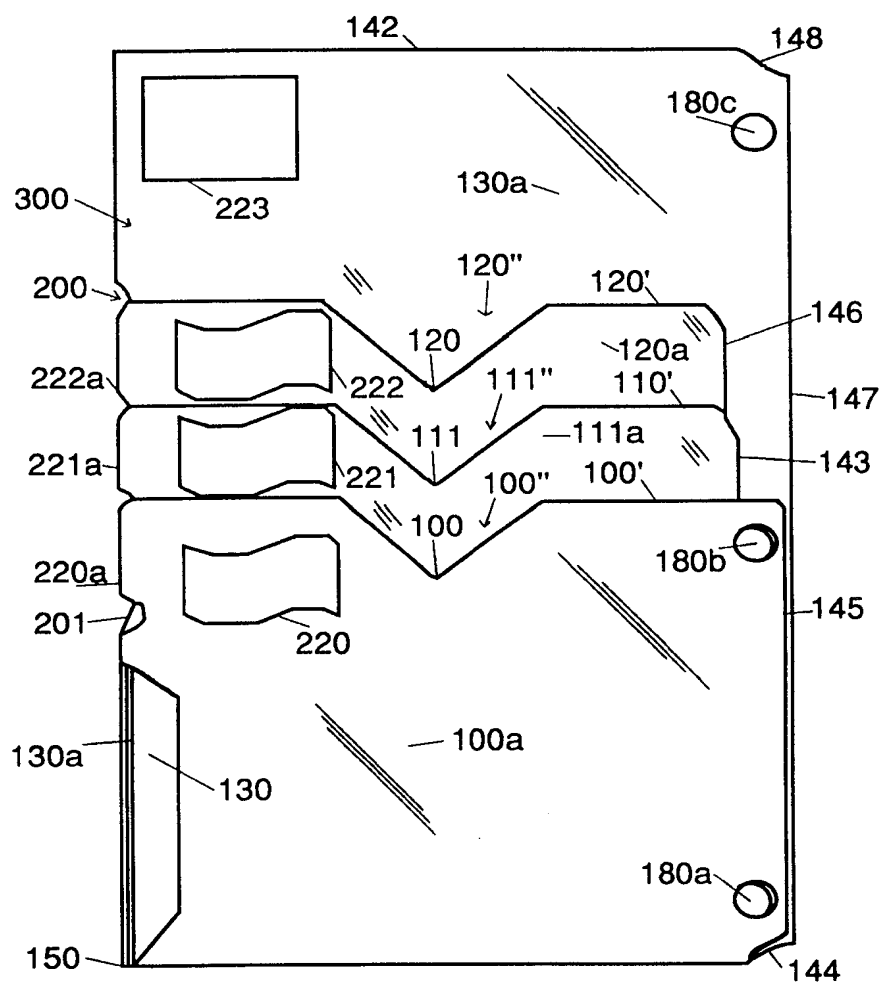
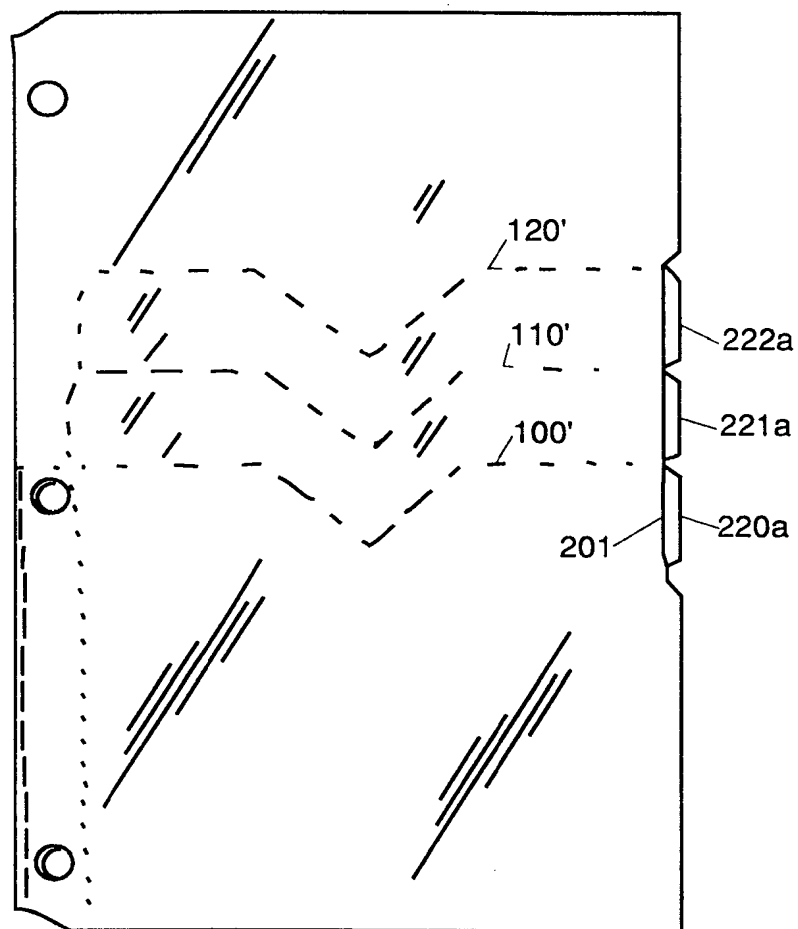
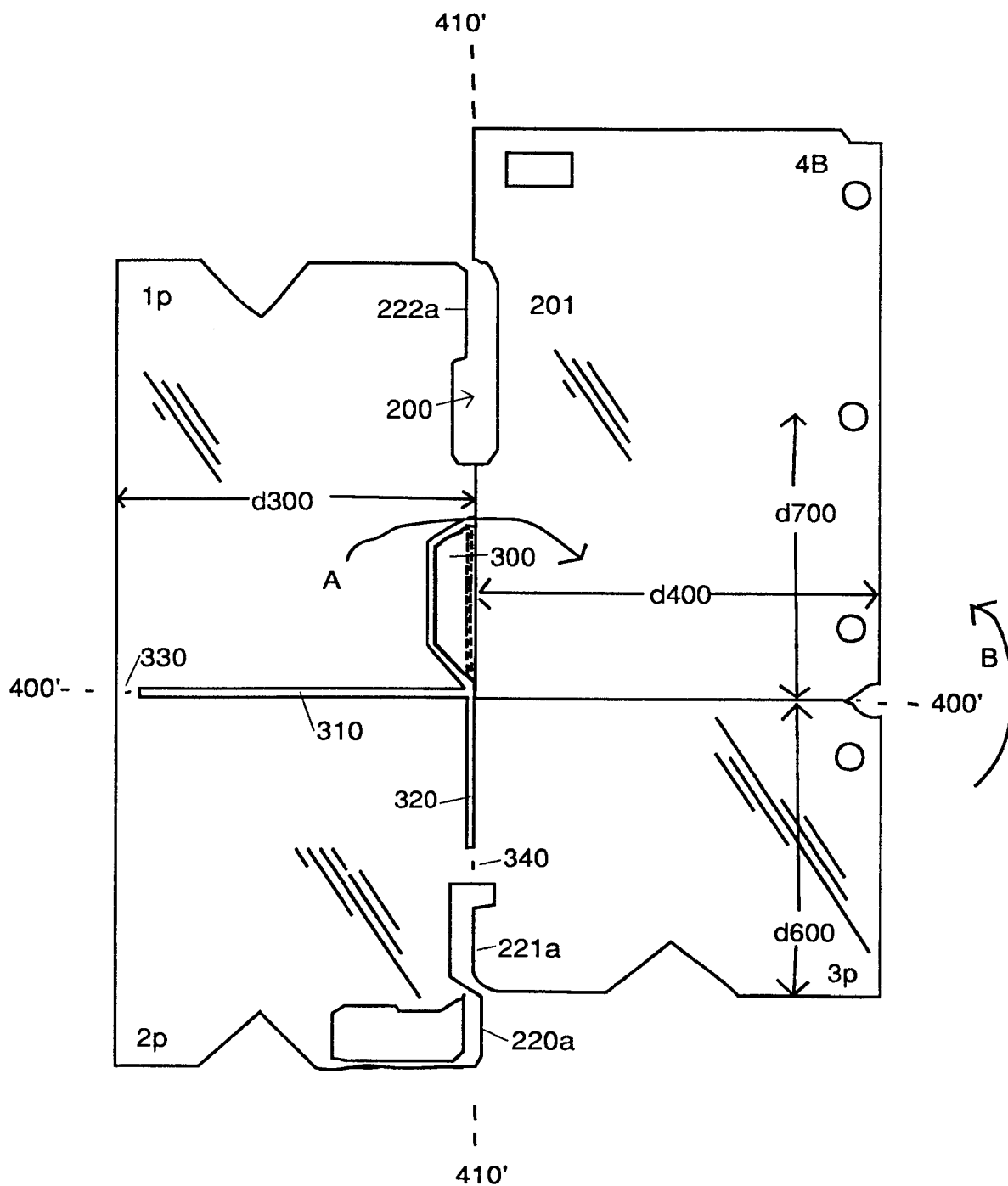
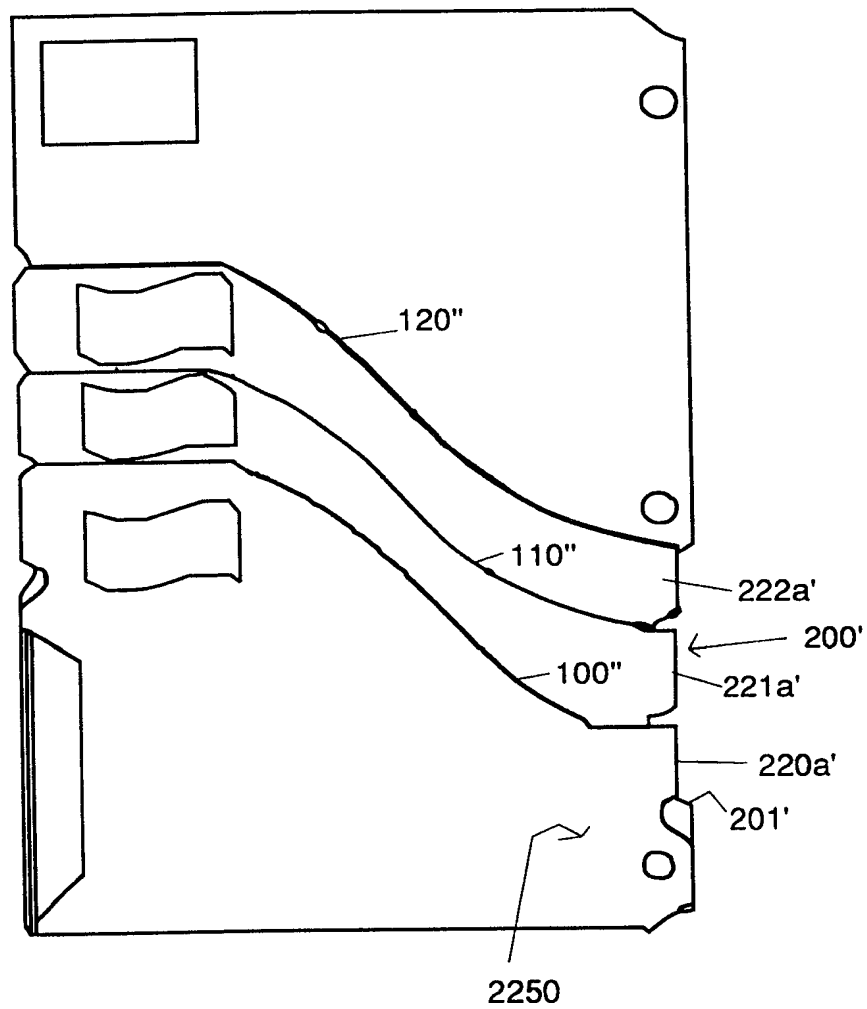


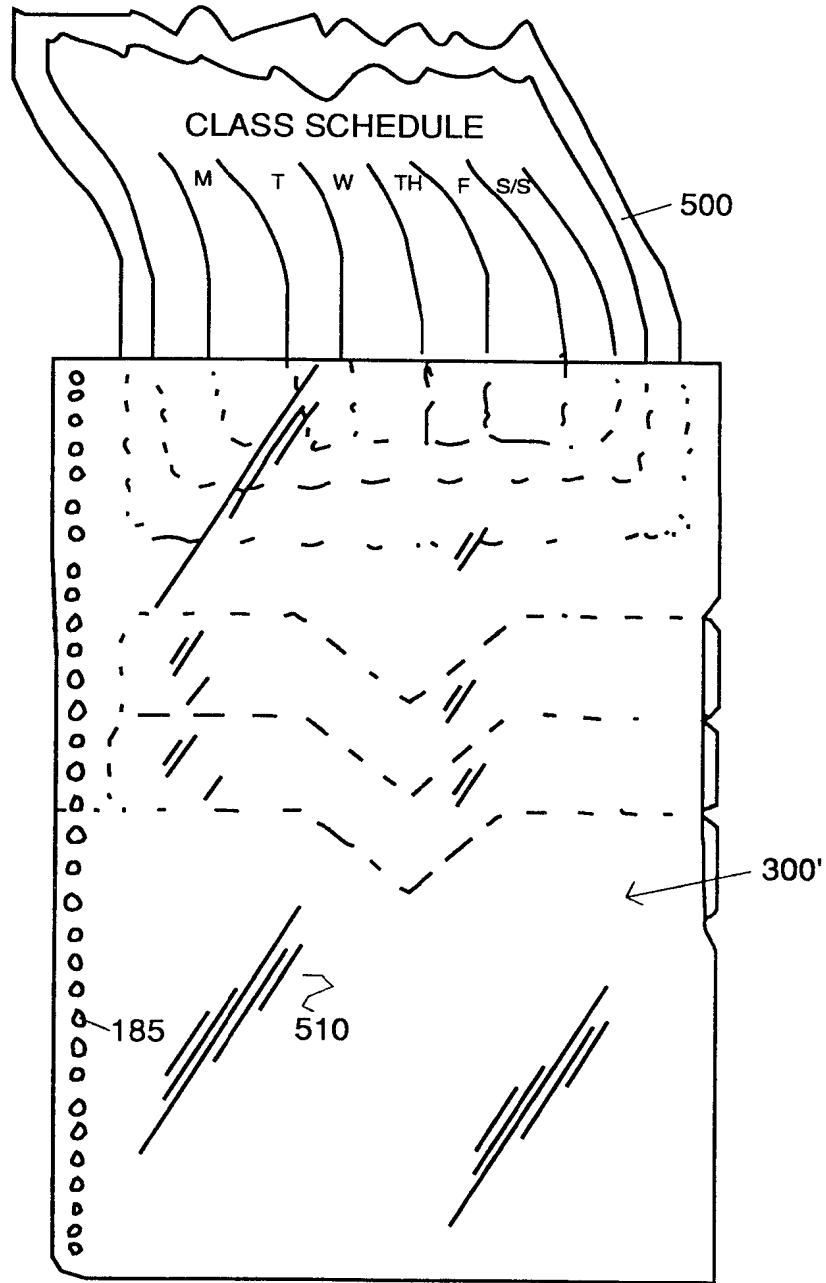
Fig. 4

**Fig.5**

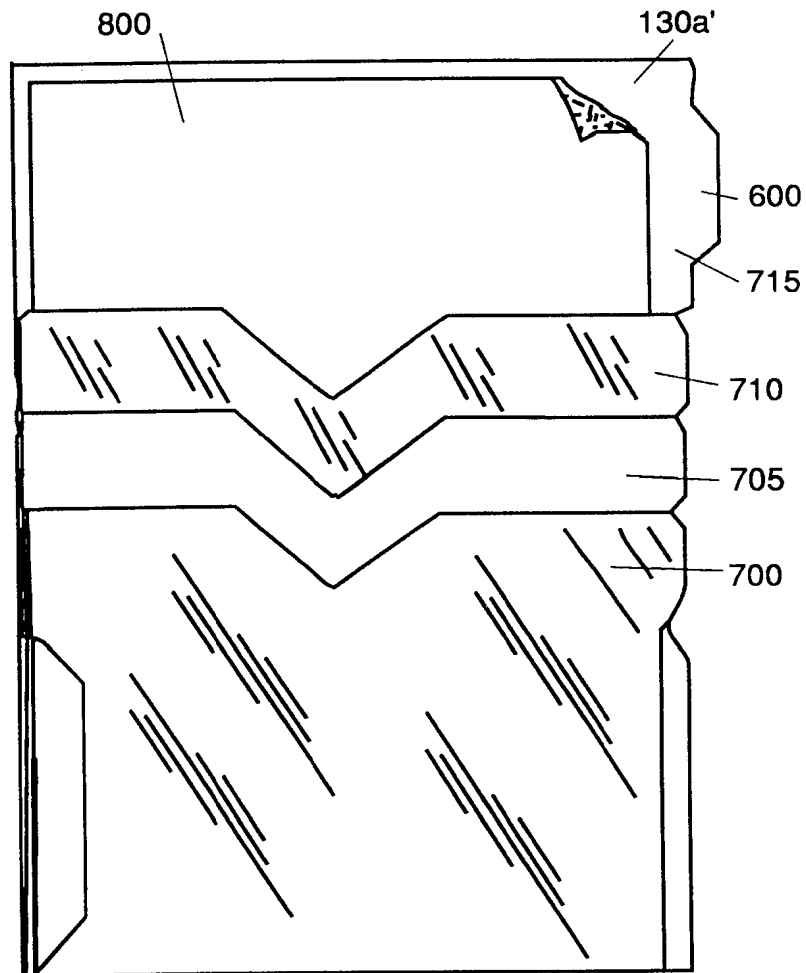
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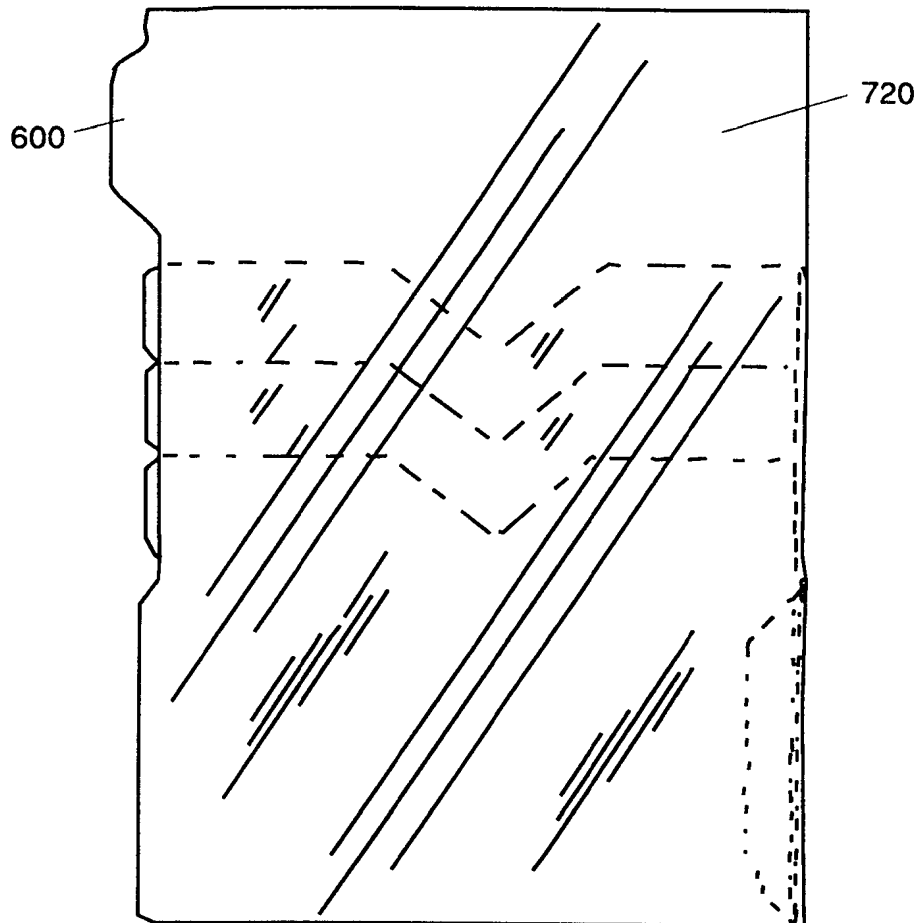
**Fig. 6**

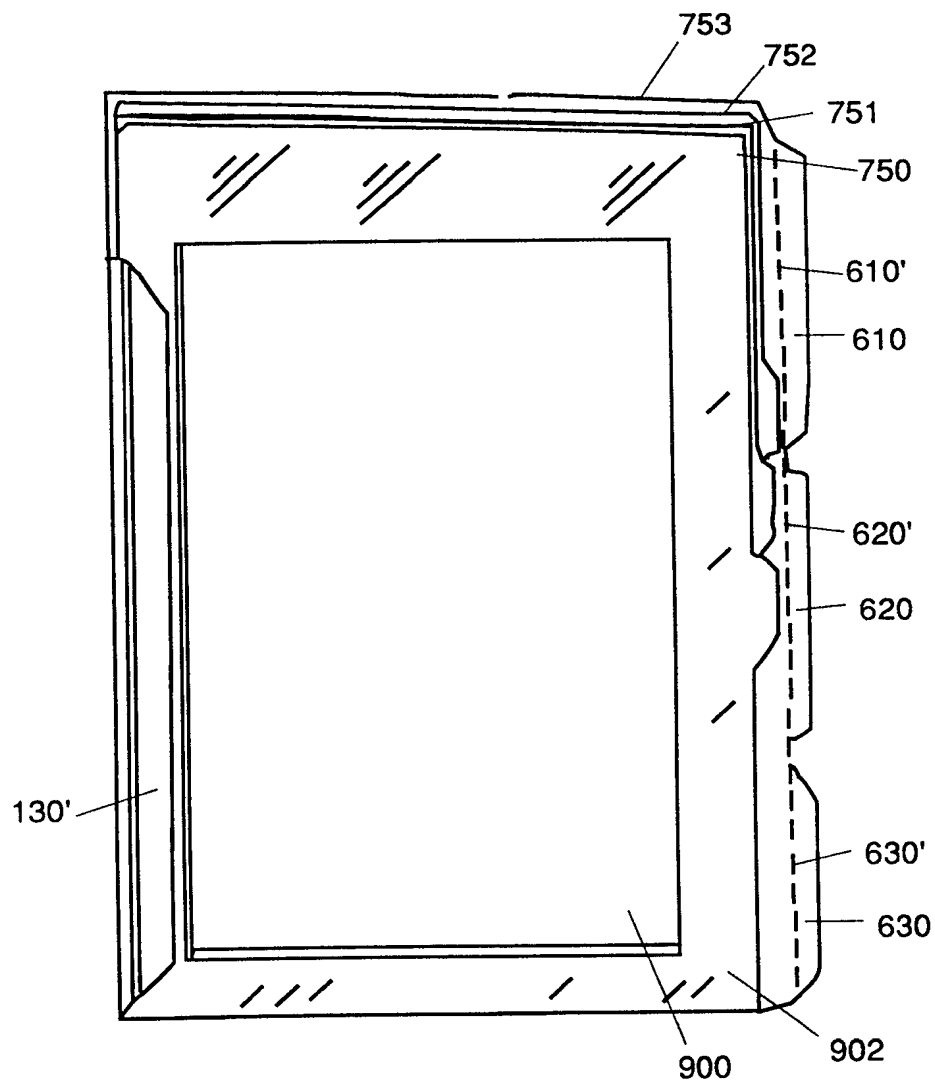
**Fig. 7**



**FIG. 8**

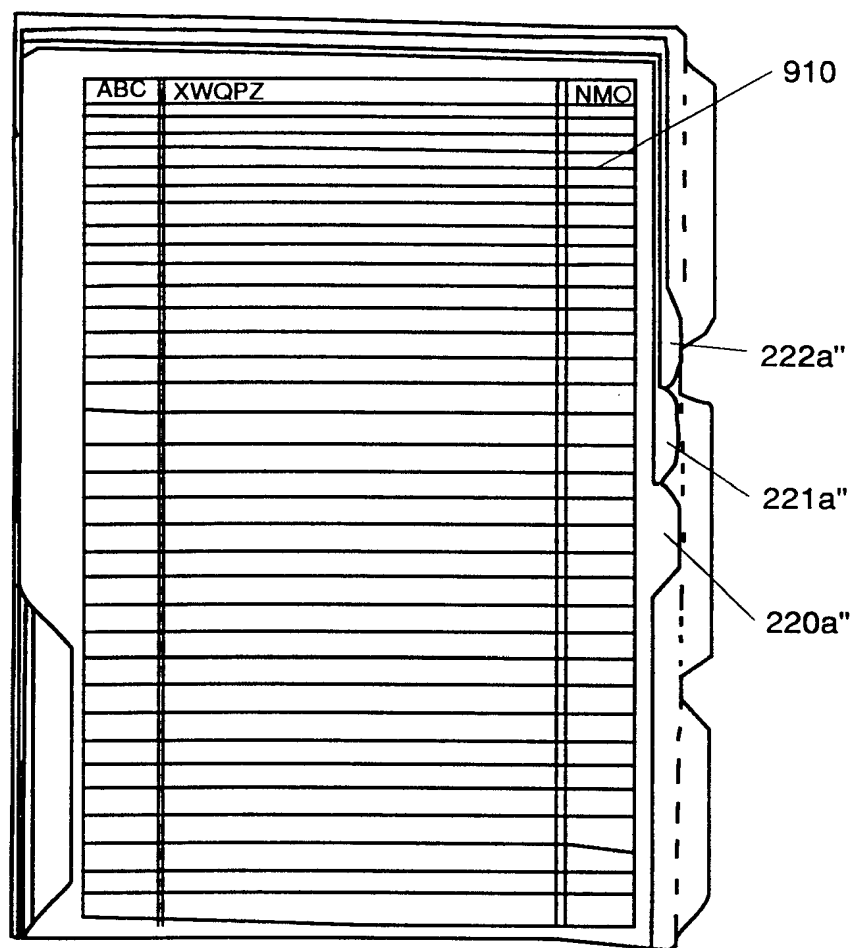
**FIG. 9**

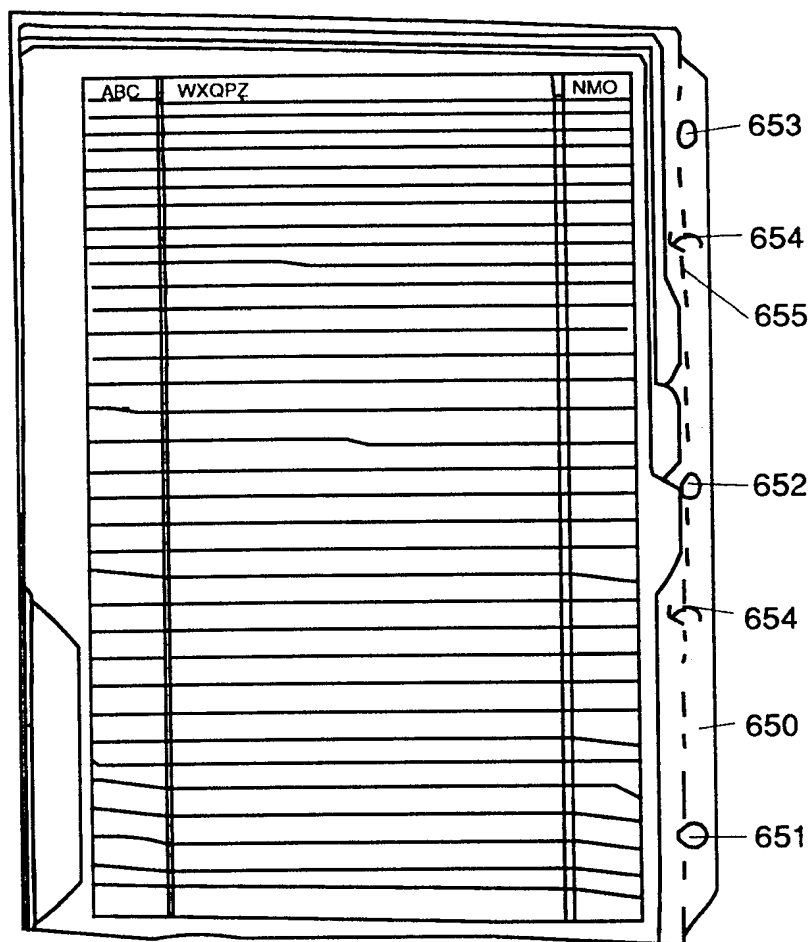
**Fig. 10**

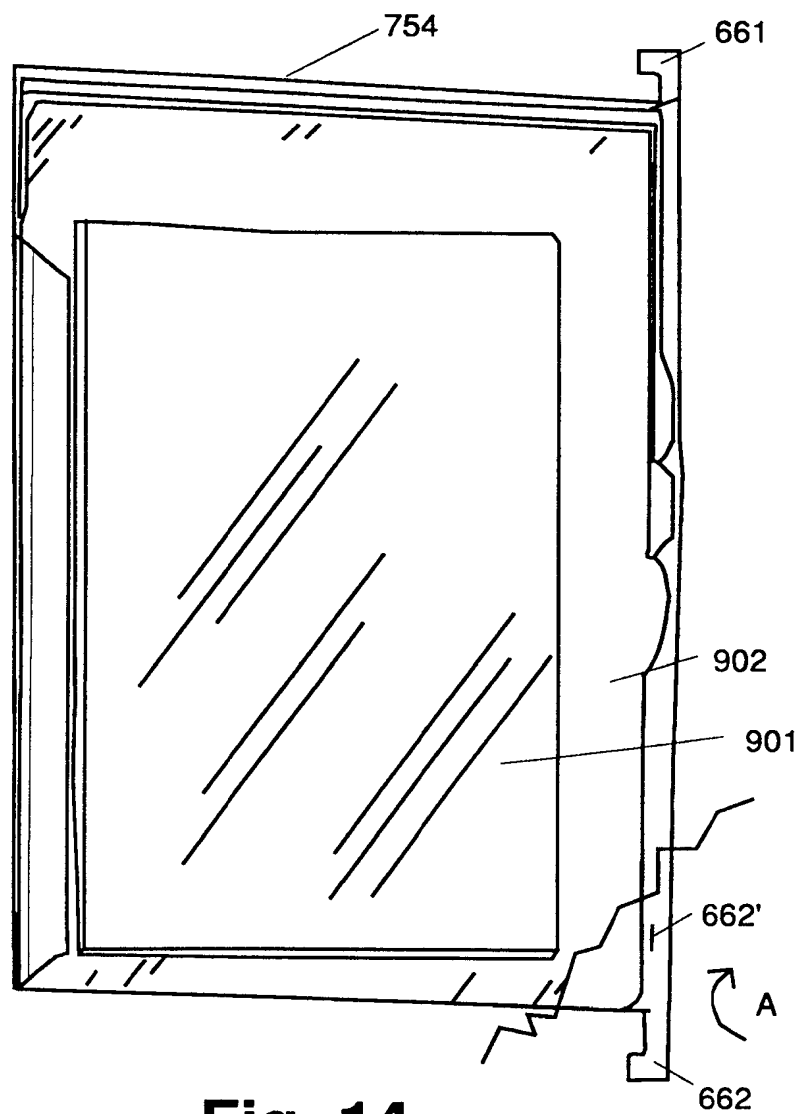


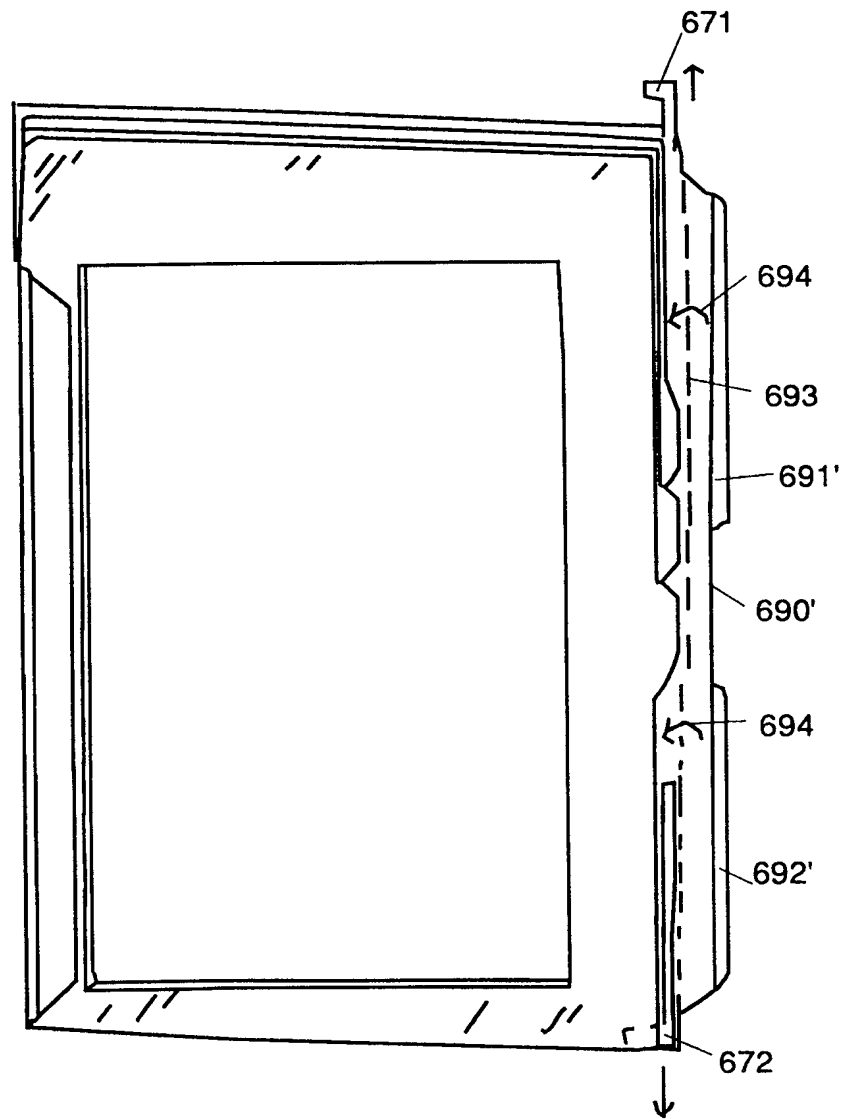
**Fig. 11**

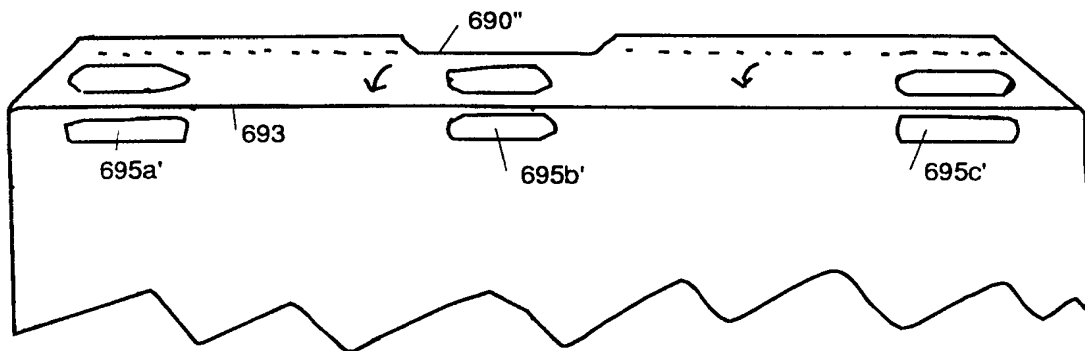
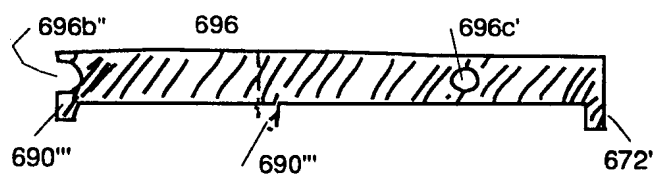
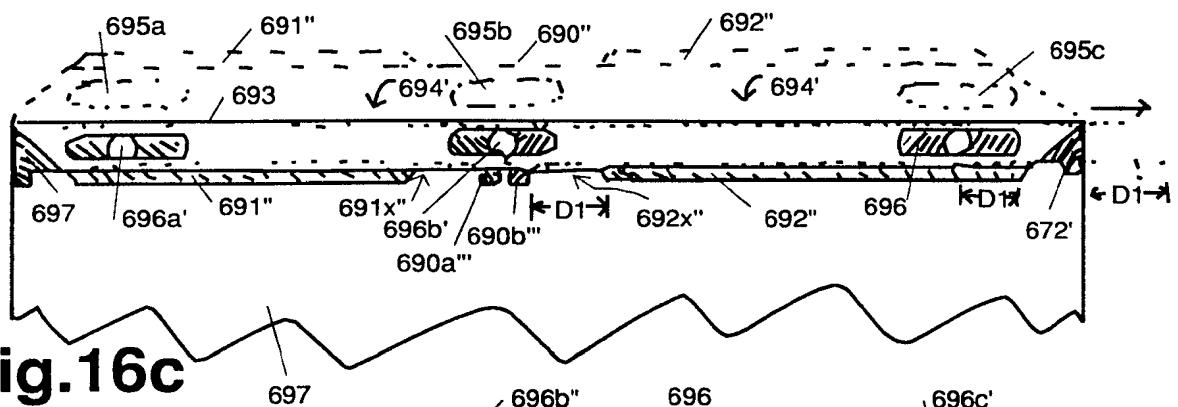


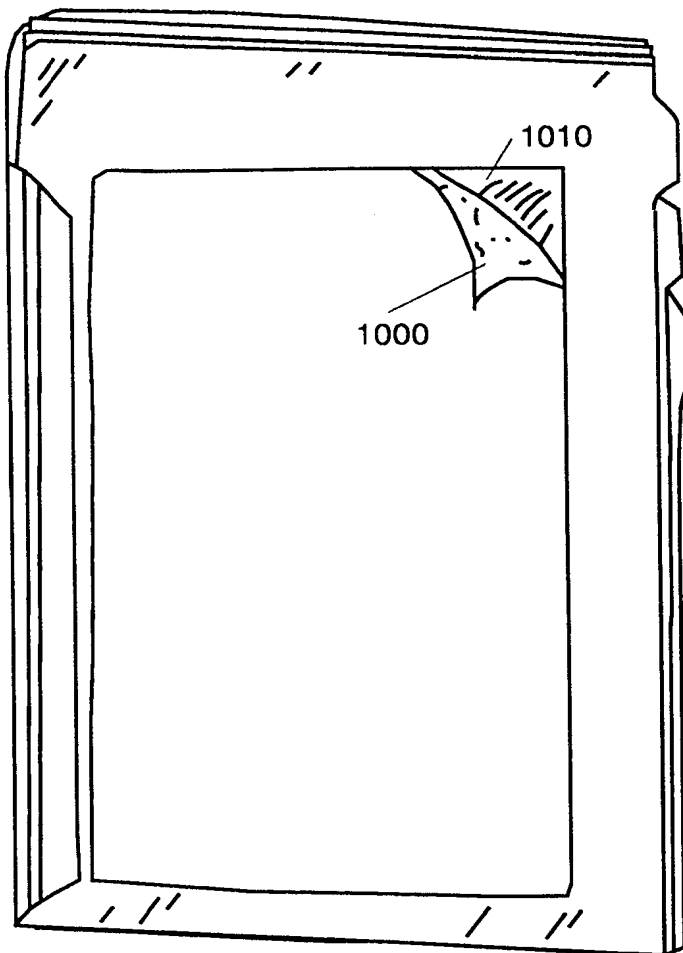
**Fig. 12**

**Fig. 13**

**Fig. 14**

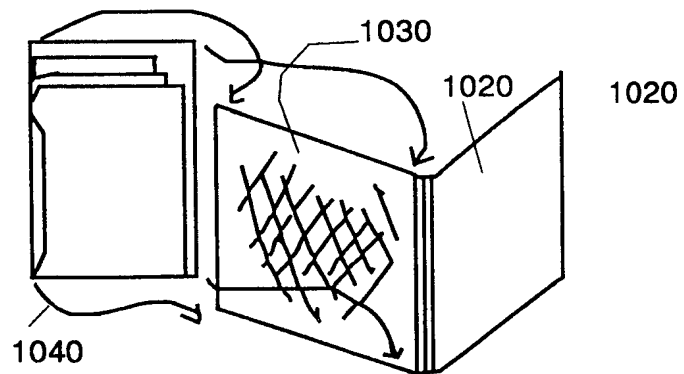
**Fig. 15**

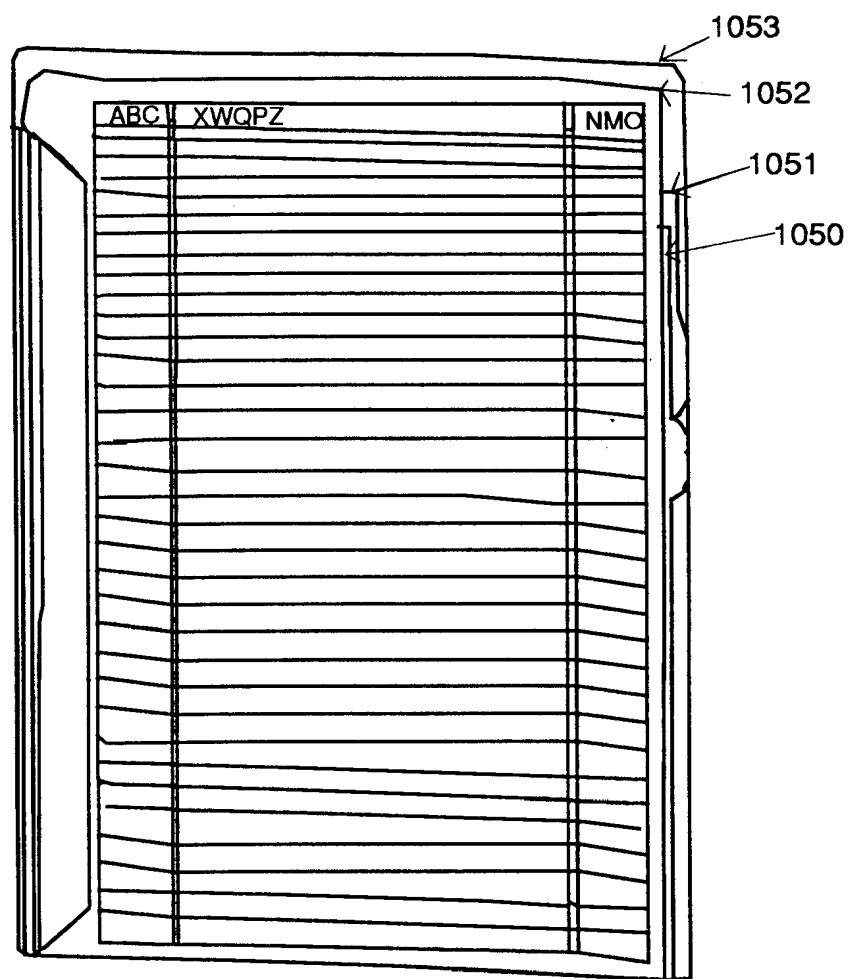
**Fig. 16a****Fig. 16c****Fig. 16b**

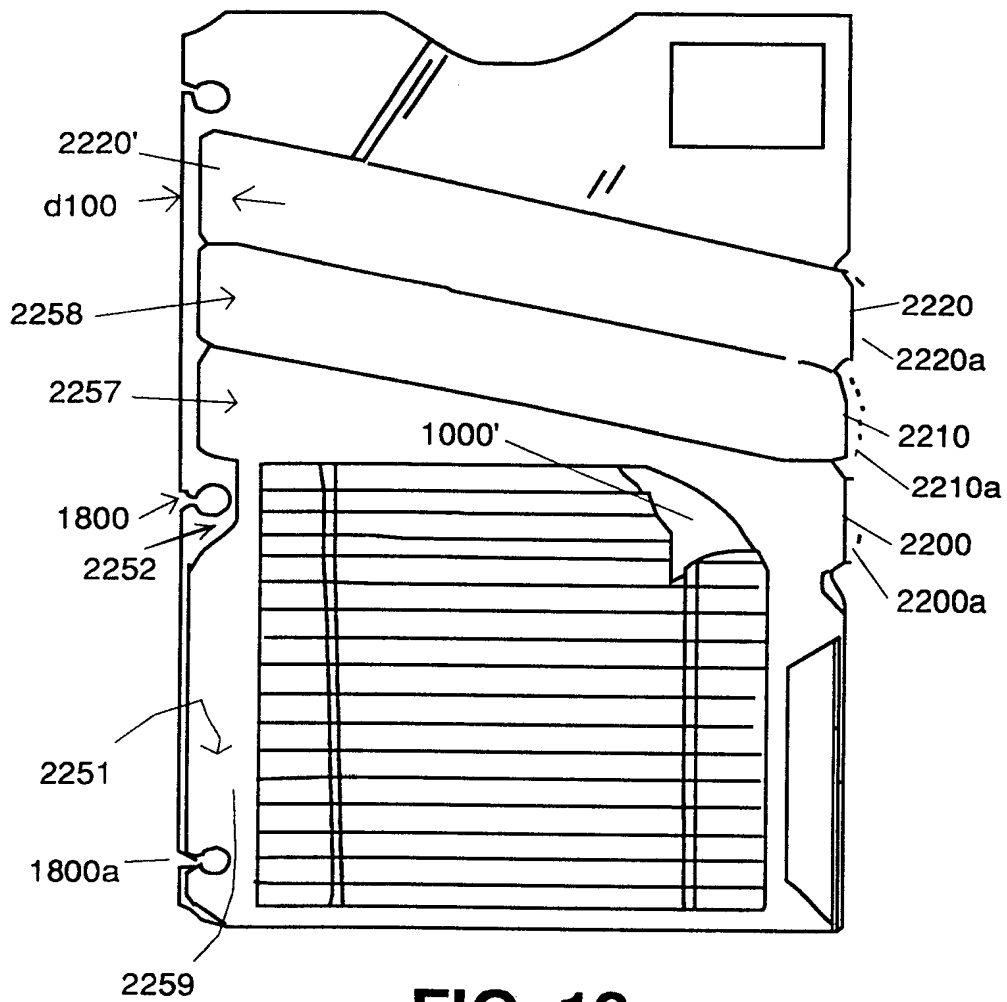


**Fig. 17**

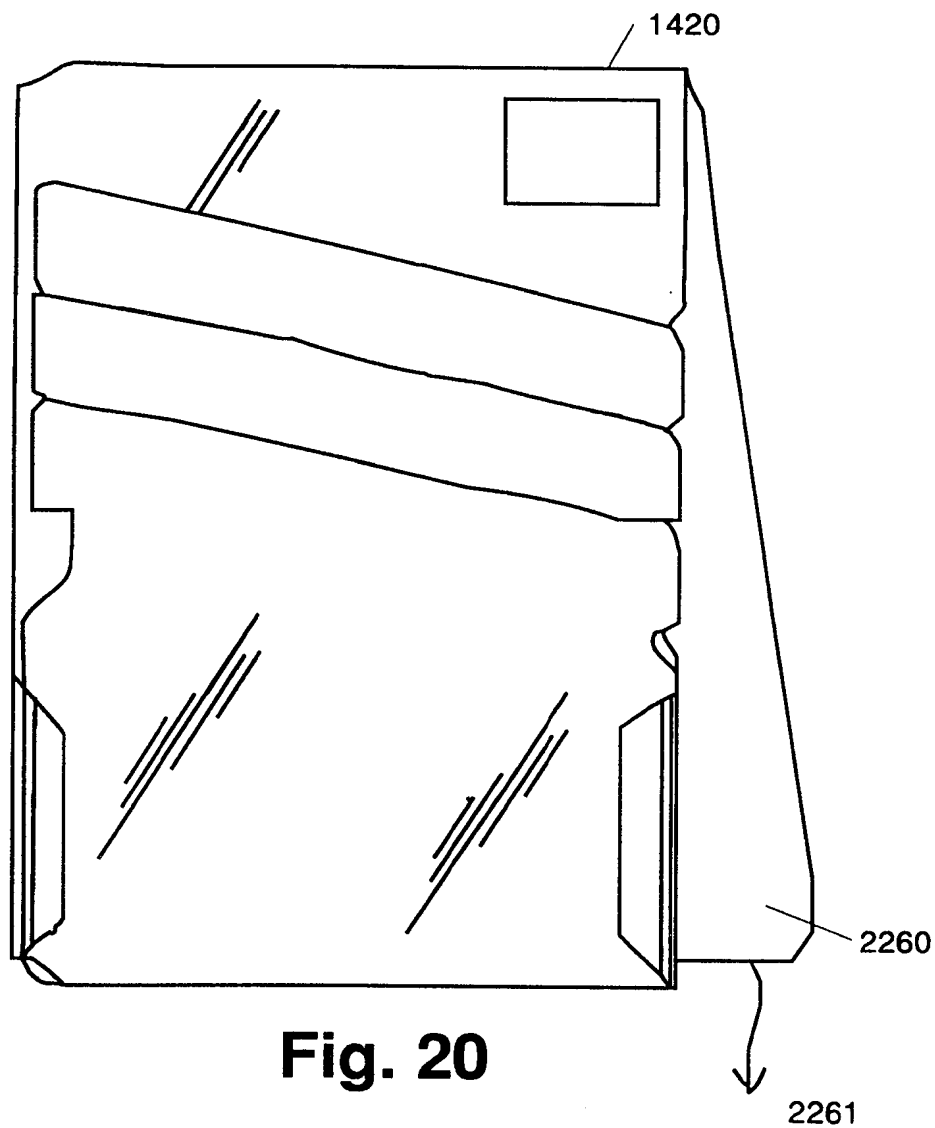
**Fig. 17a**

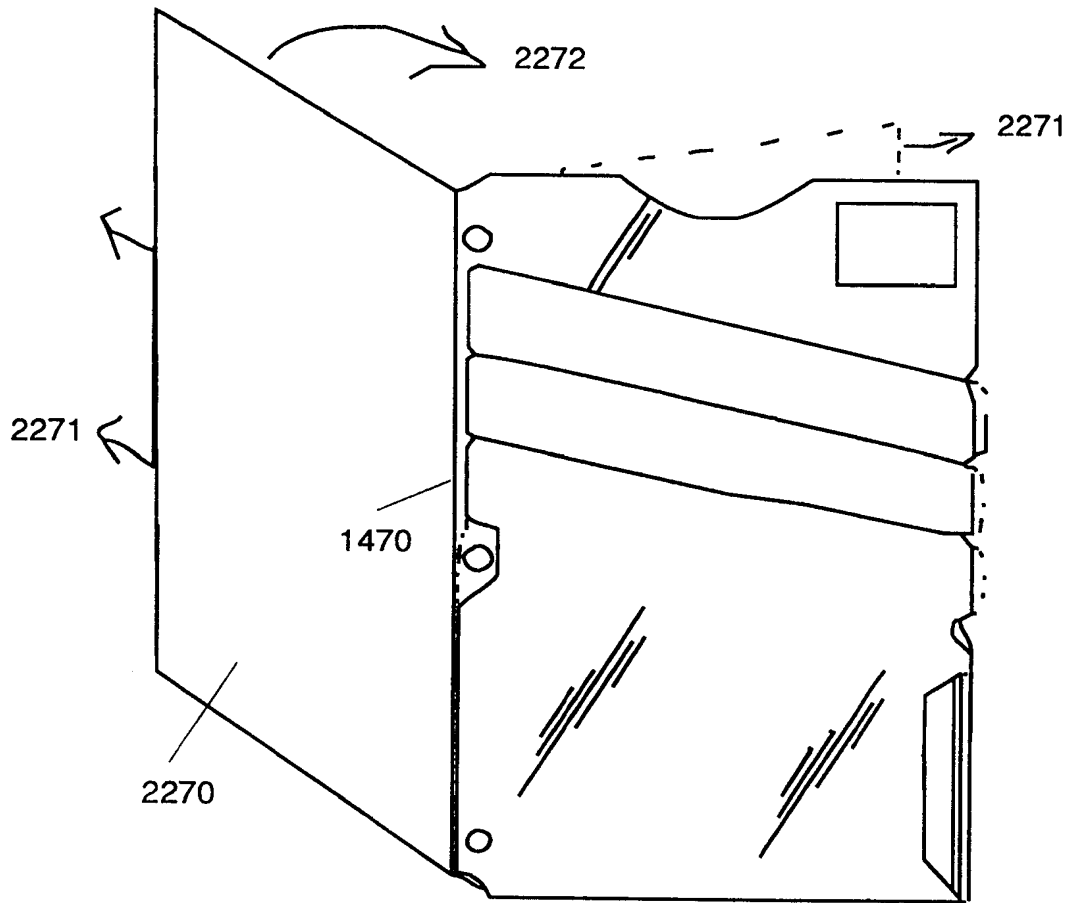


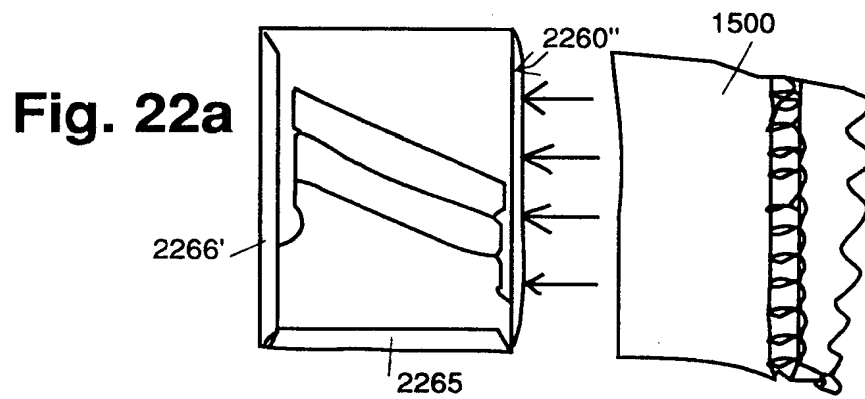
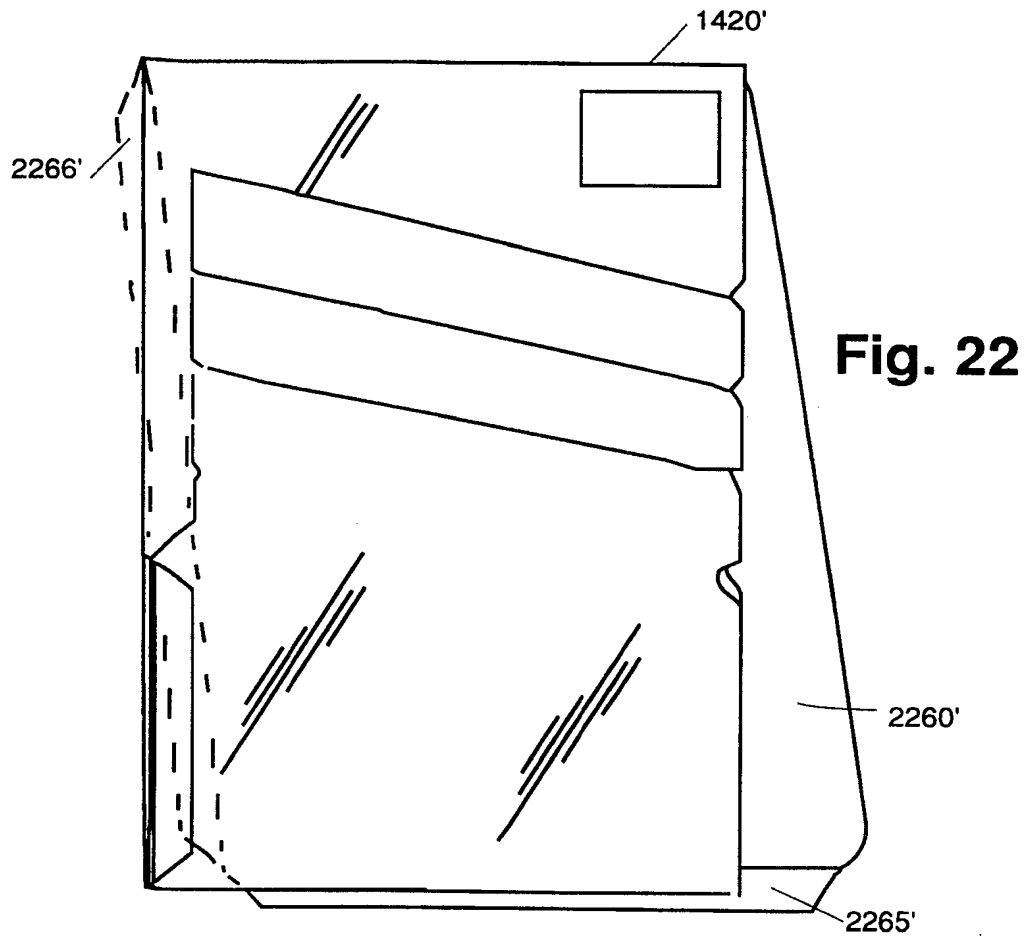
**Fig. 18**

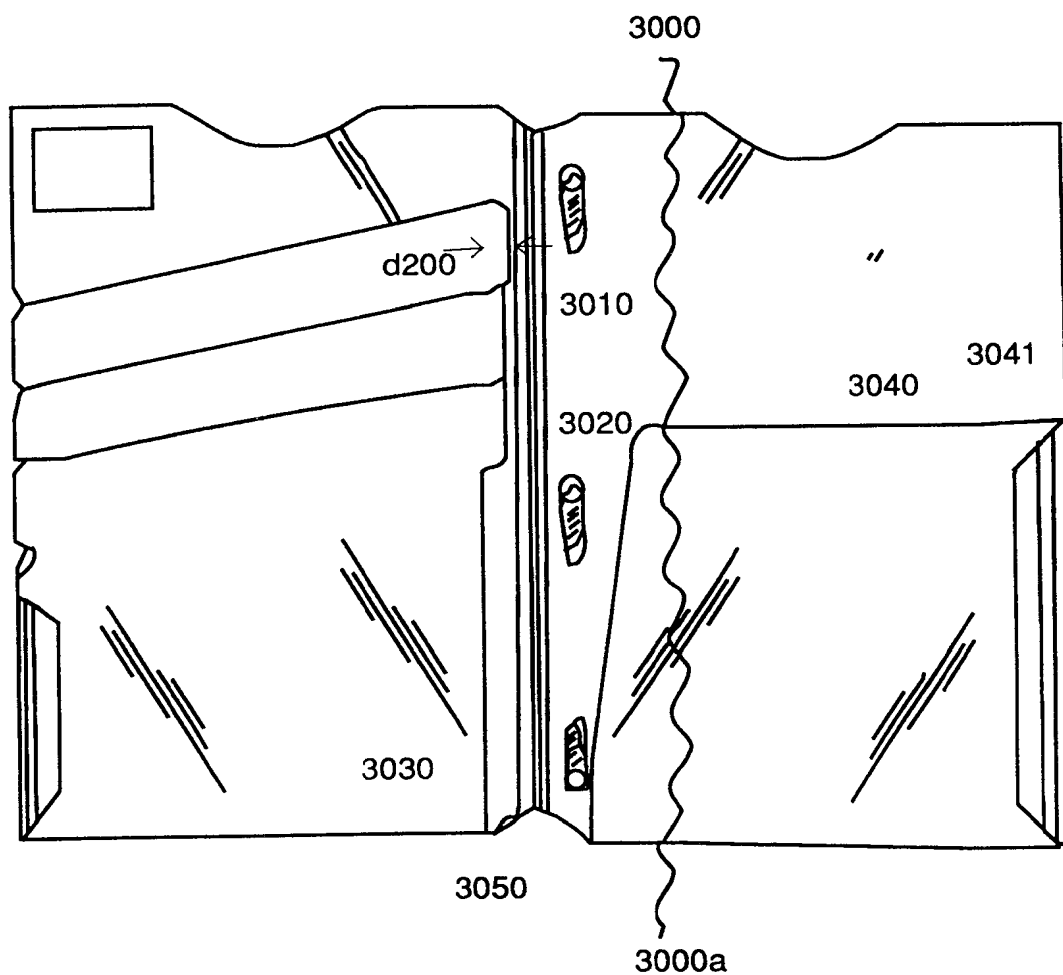
**FIG. 19**

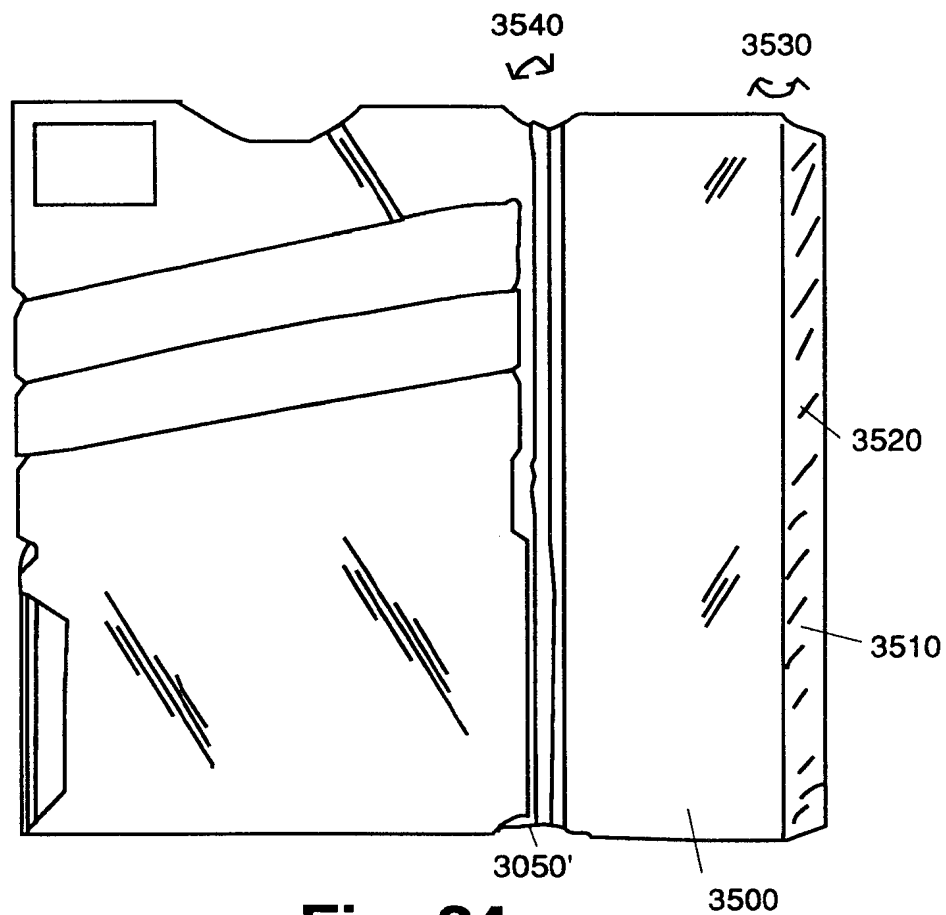


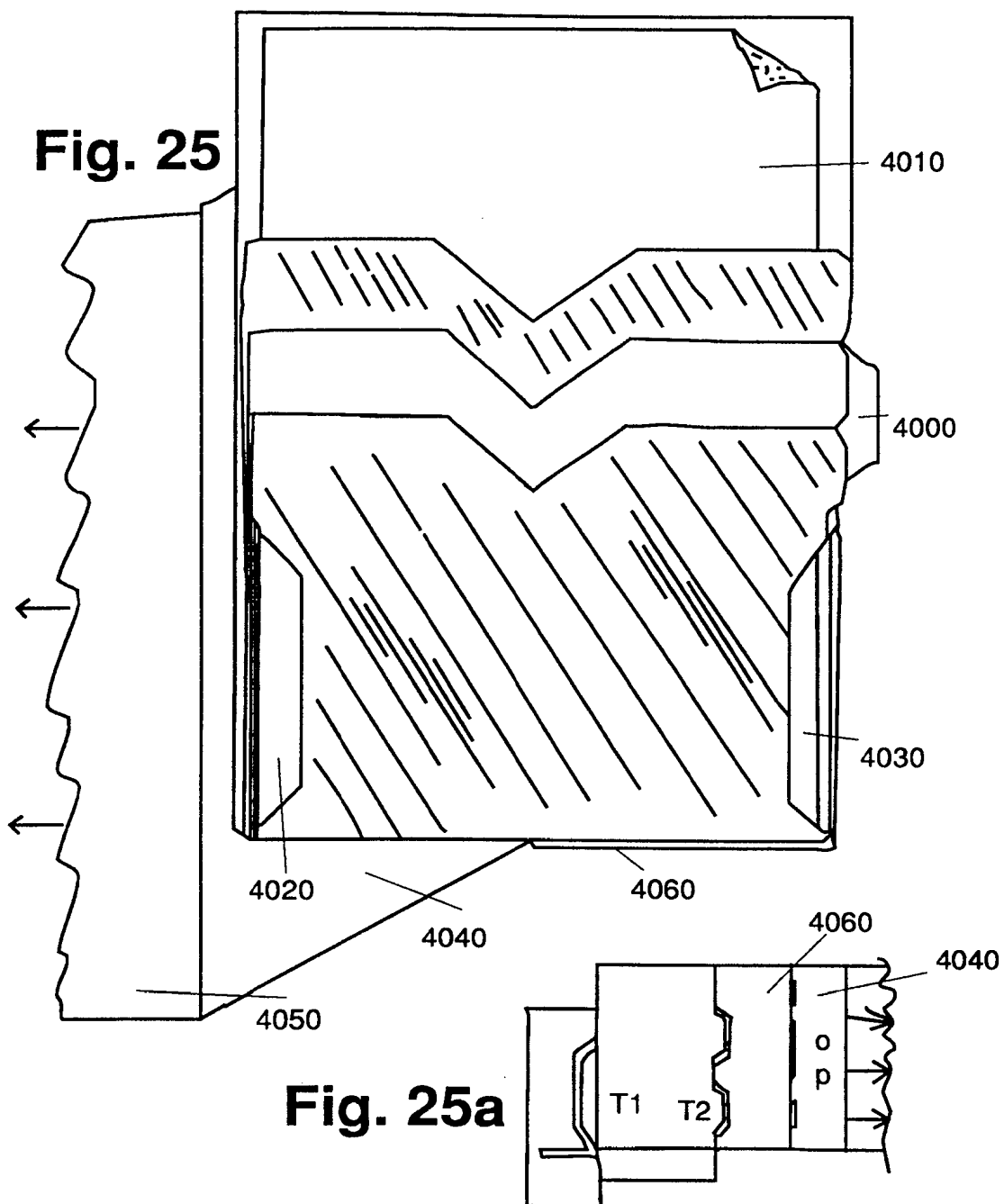
**Fig. 20**

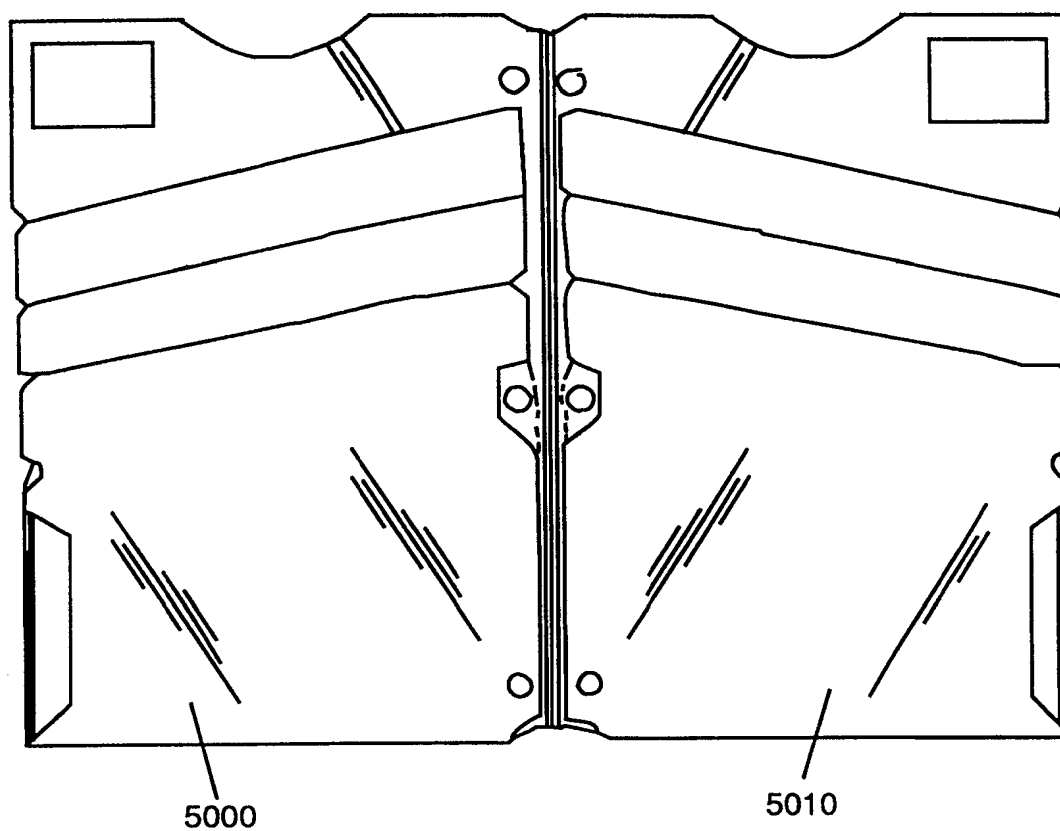
**Fig. 21**

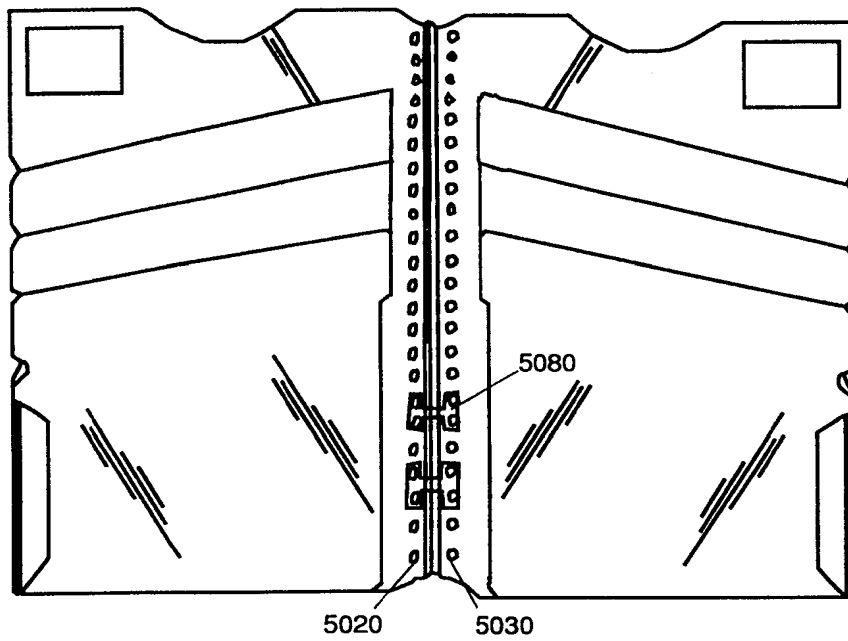
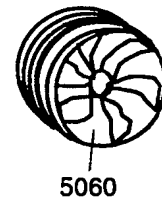
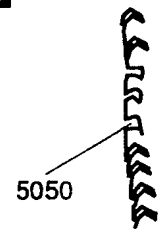


**Fig. 23**

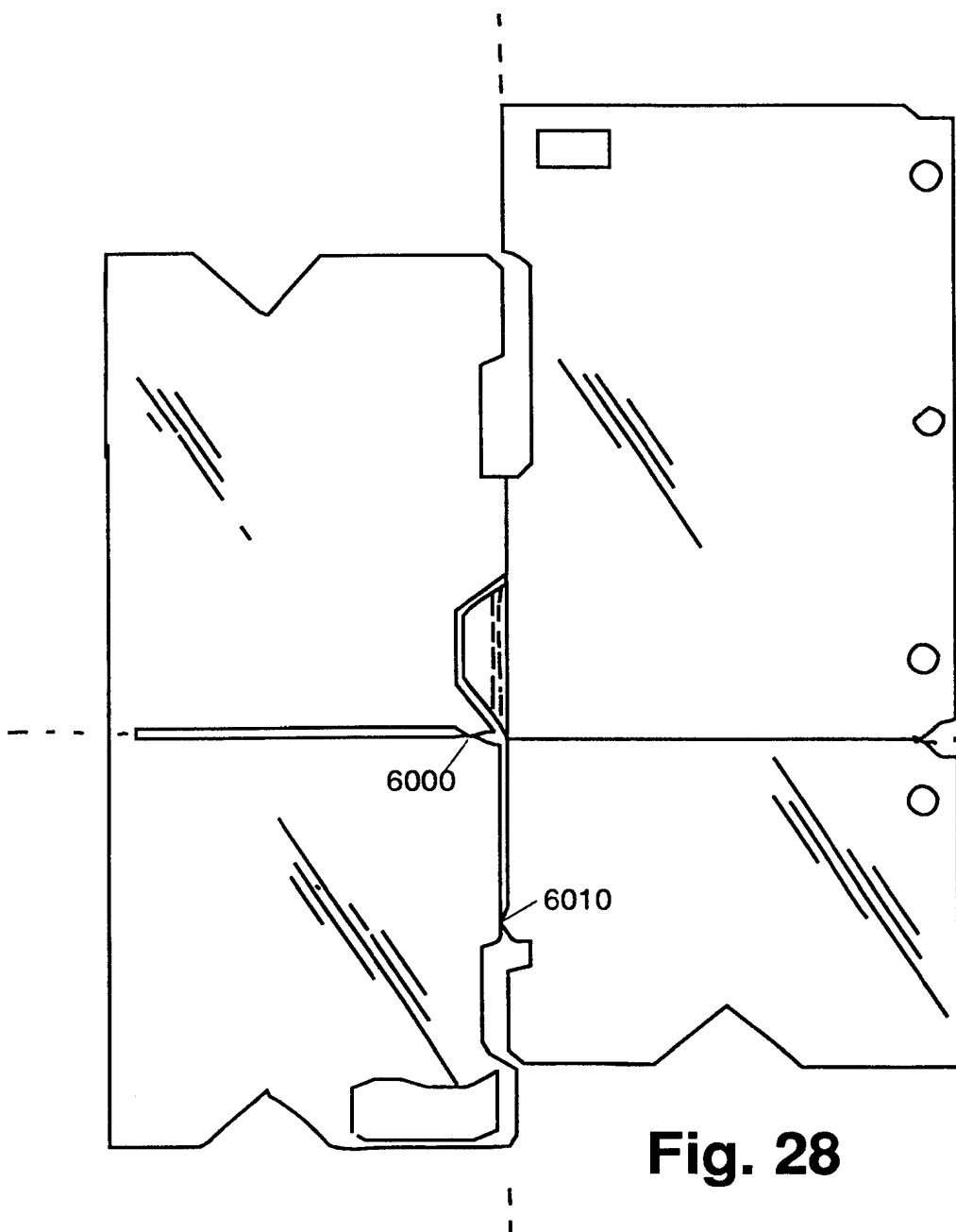
**Fig. 24**

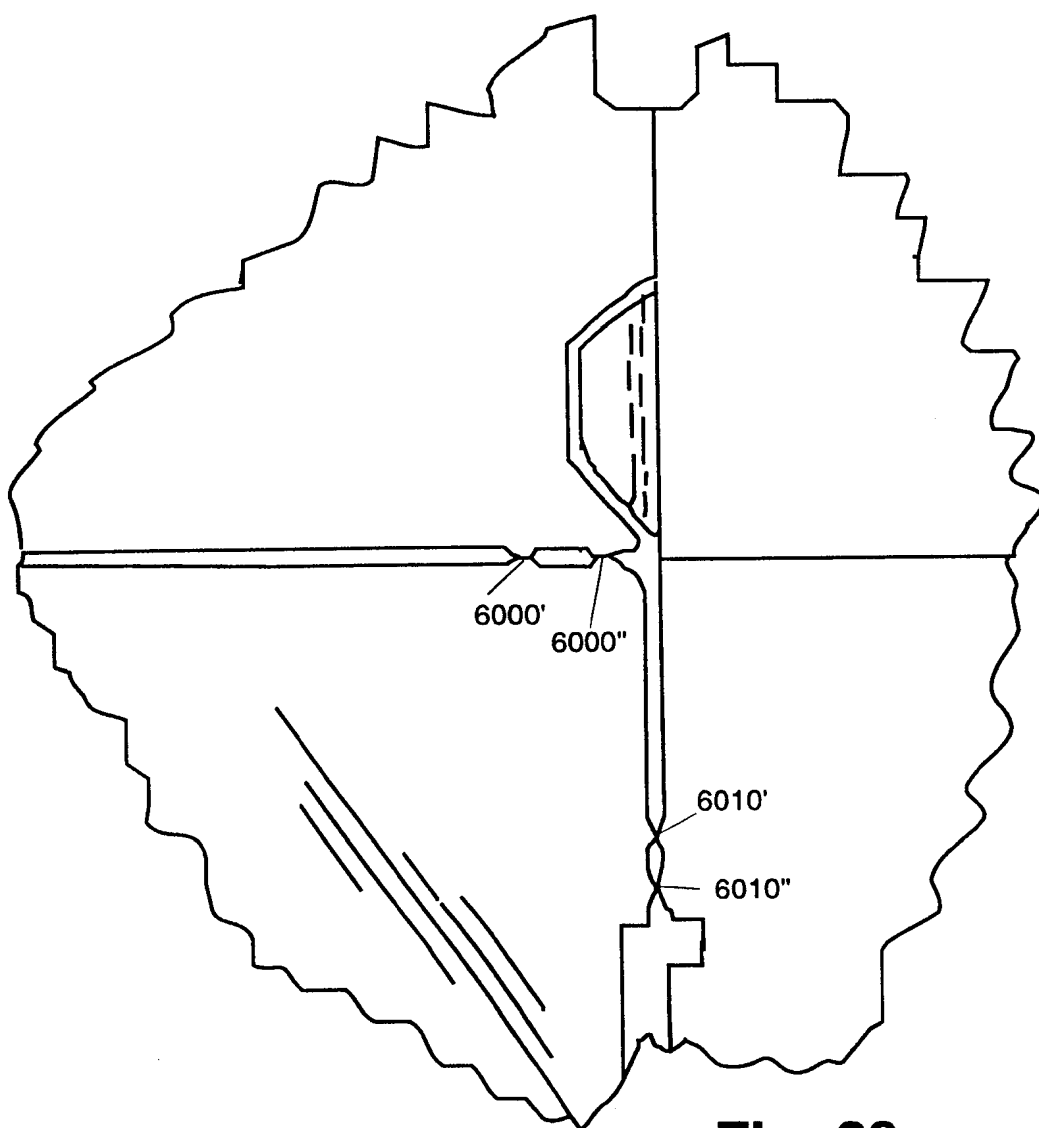


**Fig. 26**

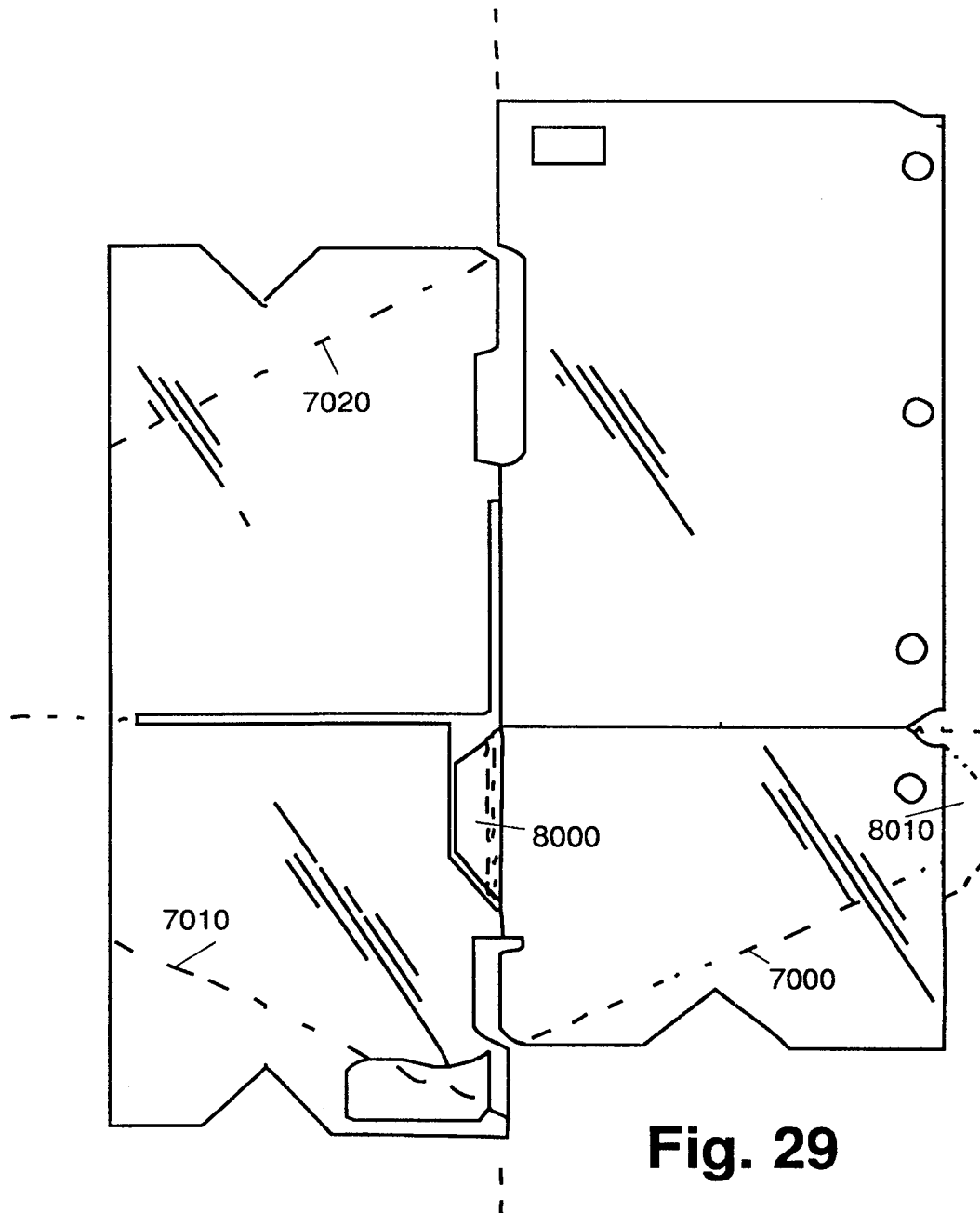
**Fig. 27**

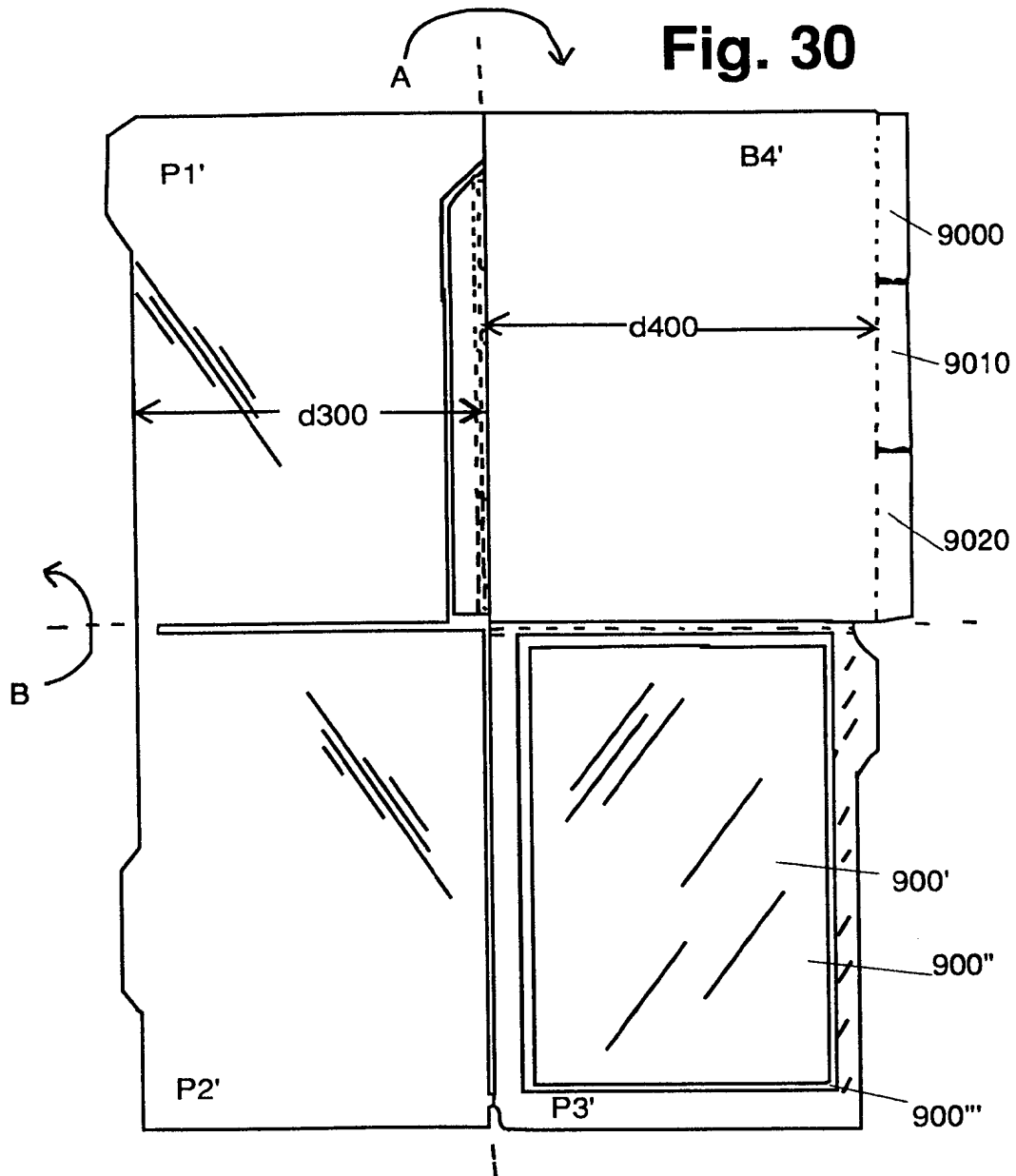


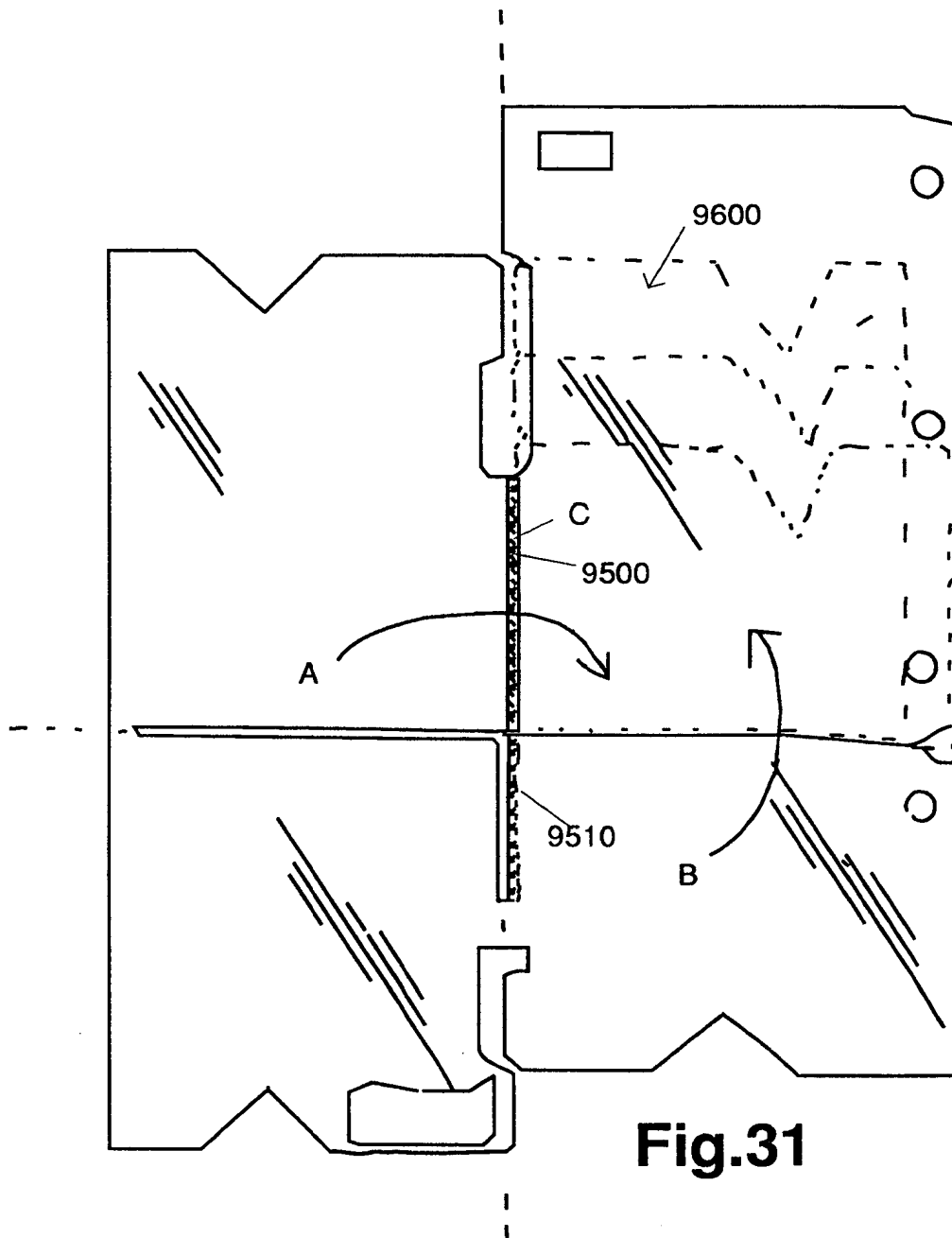


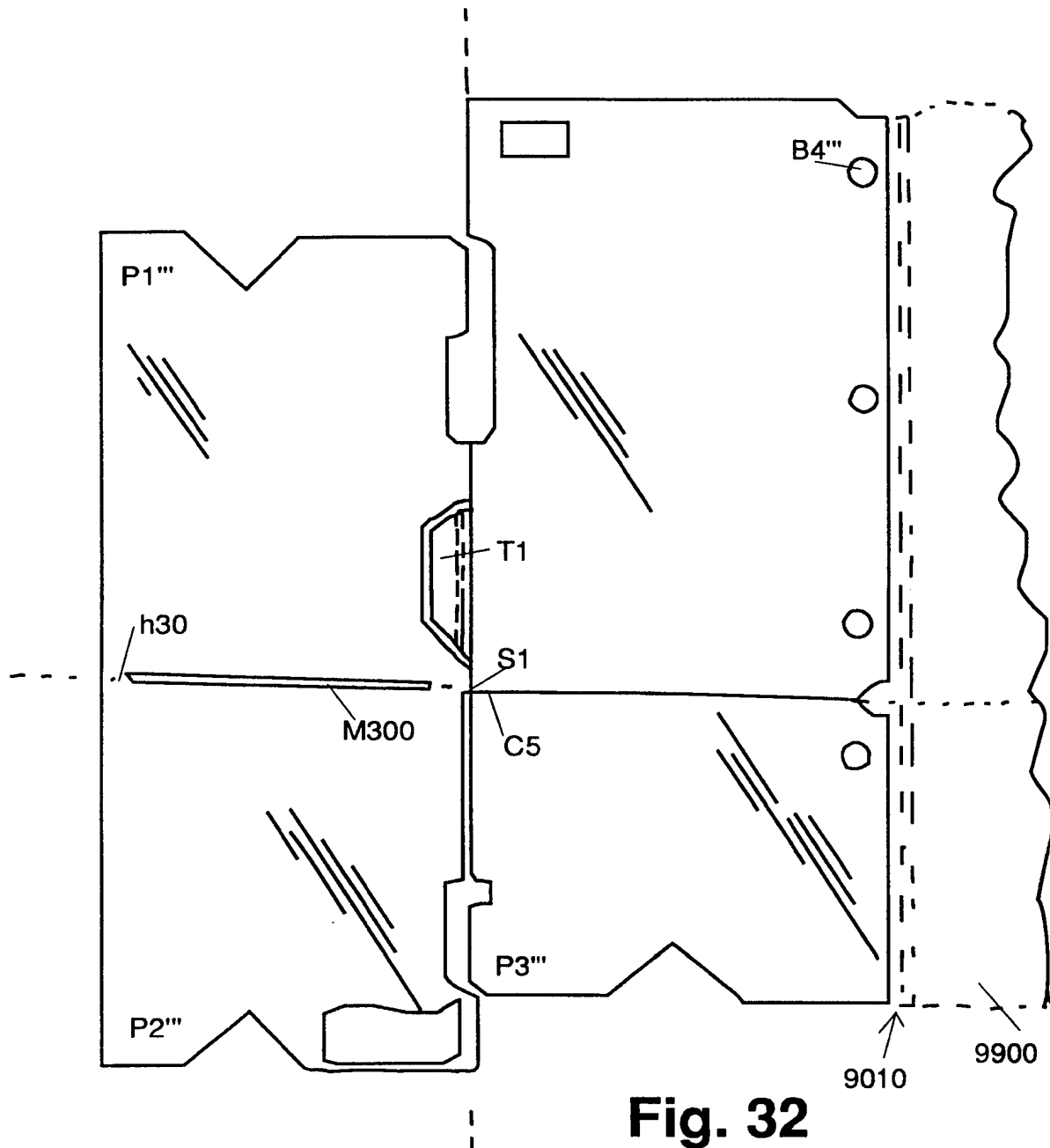


**Fig. 28a**









# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 97/23138

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 B42F7/06

According to International Patent Classification(IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 B42F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 1 133 693 A (LENNARTZ) 13 November 1968 see the whole document ----	1-15
A	EP 0 050 336 A (THOMSEN) 28 April 1982 see the whole document ----	1
A	FR 78 626 E (TOURNIER) 26 December 1962 see the whole document -----	1



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the international search

2 April 1998

Date of mailing of the international search report

14/04/1998

Name and mailing address of the ISA

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Fax: (+31-70) 340-3016

Authorized officer

Evans, A

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 97/23138

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 1133693 A		BE 693082 A CH 451083 A DE 1486768 A FR 1508856 A LU 52850 A NL 6701005 A SE 326685 B	03-07-67  17-07-69 20-03-68 20-03-67 25-07-67 03-08-70
EP 50336 A	28-04-82	DK 445380 A	22-04-82
FR 78626 E	26-12-62	NONE	